Purchasing Week

McGRAW-HILL'S NATIONAL NEWSPAPER OF PURCHASING

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Vol. 3. No. 7 New York, N. Y., February 15, 1960 $6 A YEAR U.S. AND CANADA $25 A YEAR FOREIGN

Compact Fleet Sales: It's Economy vs. Glamour

Business Outlook Stays Bright As 9 of 12 Indicators Point Up

New York—The near-term business outlook remains basically bright—despite the weak spots cropping up in some lines.

Economists and business experts are practically unanimous about this. And they have most leading business barometers—which are still pointing up—to support their still optimistic view.

These experts see no contradiction posed by the recent weakness in auto sales, by the easiness in steel warehouse prices, and the less-than-anticipated rate of inventory accumulation. They see such trouble spots only as indications that the current boom isn't going to be a one-way street—that not all industries and all areas will share equally in the boom.

A special review of PURCHASING WEEK's 12 leading economic barometers bolsters this forecast of a continuing selective near-term uptrend. Despite weakness in construction and a few other indicators, the barometer analysis shows a relatively bright economic picture.

A closer look at some of the specific business barometers (see above for summary) can help spotlight for you what lies ahead in major business areas.

● **Days' supply**—At the beginning of the year, purchasing executives on the average had only about a two month supply of hard

(*Turn to page* 4, *column* 3)

Food Industry P.A.'s Ask Firm Plastics Guarantee

San Francisco—Food industry buyers are demanding written guarantees from suppliers that packaging materials will meet the new Federal Food and Drug Administration requirements.

"The day of 100% acceptance of a material is over," admitted L. G. Maclise, sales manager for Dow Chemical Co. here. "P.A.'s want written proof the package won't get them in hot water."

Maclise, attending the recent Plastics and Packaging Symposium of the Dairy Industry Conference here, said his company has had "a startling increase in the number of letters from fabricators and packagers asking for

(*Turn to page* 38, *column* 4)

Steel Buyers Say the Heat's Off Now Because of Fast Supply Comeback

Pittsburgh—Steel buyers reported last week that they aren't scrambling any more.

As steel production began what many industry sources termed a "gradual tail-off," most users around the country admitted they have been able to rebuild inventories "faster than anyone had anticipated"—to a level almost double that of two months ago.

In Cleveland, the Steel Service Center Institute reports its members had between 1.5 and 1.6 million tons in stock at the start of this month—about double the tonnage on hand in late November and early December.

Other key-industry steel consumers also reported higher-than-expected inventories. Tinplate buyers, for example, who expected to be in a tight supply situation for the entire first half, now say they've been receiving "better than 15% more than the mills had originally allocated."

In Chicago, National Can Co.'s chairman Robert S. Solinsky says his firm is "getting all the steel

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P/W PANORAMA

● **When You See a Price Increase Coming,** a handy mathematical formula may solve your forward buying problems. But whether you use rule-of-thumb, a pocket calculator, or sliderule, your solution probably is based on a single basic equation. Read how P.A.'s use it on p.p. 6-7.

● **You'll Find Few Surprises This Year** in prices of nonferrous metals. The outlook is for generally stable levels with only narrow fluctuations. An analysis of what to expect in 1960 appears on p. 13.

● **Metal Stampings Vary in Size** from tiny shoe eyelets to freight car ends. Thousands of suppliers are in the business. Two experts describe 10 ways to cut costs and sharpen your buying techniques on p.p. 16-18.

● **Leading Chemical Companies** have embarked on a major standardization program. The goal: Cut costs by at least $5.2-million annually. Where and how this will be accomplished is described on p. 29.

COMPETITIVE SLIPSTICK: Calculator offered by Alcoa speeds price comparisons on brass and aluminum screw machine products.

Coal Wins Round From Oil in New ICC Rate Ruling

Washington—Coal took the first round from residual oil last week in a "battle of fuels" over the big East Coast electric utilities market.

An ICC examiner ruled that 56 coal-carrying railroads were justified in cutting freight rates to keep major Atlantic coast utilities—coal's best customers—from switching to oil.

Oil men, represented by the Empire State Petroleum Assn., a jobber group, are expected to appeal examiner Edward L. Boisseree's ruling to the ICC before the March 1 deadline for filing exceptions.

The courts may finally decide the issue. In the meantime, the railroads and coal producers are continuing to supply 9.4 million tons of coal annually to the generating plants equipped to use both fuels.

Coal began to see its utility business slip in late 1958, and quickly spotted the cause: mounting oil imports and falling prices. The pinch came from utilities on the water's edge, where tanker deliveries give oil the sharpest competition.

Coal's deal with Consolidated

(*Turn to page* 37, *column* 4)

Private Fleet Operators Size Up Coming Growth

New York—Private fleet operators are currently eyeing the prospect of tremendous capital investments in equipment needed to keep pace with rapidly changing patterns of distributing and handling goods.

Transportation executives, attending the annual convention of the Private Truck Council of America, Inc., recently pinpointed these developments as

(*Turn to page* 37, *column* 4)

AFL-CIO Offers Management A Sprig of Olive

Miami Beach—AFL-CIO leaders this week mapped out an ambitious—and surprising—strategy to better their record in organizing and at the bargaining table.

Meeting in mid-winter conferences, the 29-man ruling AFL-CIO executive council decided:

● To actively extend the olive branch to management for friendly meetings away from the negotiating table.

● To warn, and then crack down, on affiliated unions who don't cooperate in a campaign to round up new white collar, professional and Southern workers.

Both plans are designed to bolster the AFL-CIO's poor rec-

(*Turn to page* 37, *column* 1)

It Makes Scents

New York—You may soon be able to pick up a package and "smell" what's in it. Fragrance Process Co., Inc., has developed a series of scents that can be built into polyethylene packaging film.

Smells perfected to date include: Clean linen (for laundry), perfume (women's lingerie), spruce (men's sportswear), chocolate (candy), and cookie (need we say).

The additive is in the form of a dry concentrate that is blended with the plastic resin when the film is manufactured. Price varies, with the scent, from $1.50 to $5 per lb.

Dollar Saving Seems Winner; Resale Value Uncertain Until '61

Detroit—Compact cars are making rapid and impressive gains in the fleet market. Hold off your verdict on a sweep, though, until all the evidence is in on these three major counts:

1. Their real economy on an actuarial basis.

2. Their resale value.

3. Their fight to overcome salesmen's gripes over prestige.

A nationwide PURCHASING WEEK survey of industrial and governmental fleet buyers shows compacts are now gassed up and ready for an all-out drive on fleet markets. While many Detroit fleet sales managers agree, they add that buyers, to a large extent, are still obeying the above "caution signals."

They point out that the real test of over-all economy—at least for the Big Three compacts—will come at the beginning of the 1961 model year when doubts over resale value will be clarified, one way or the other.

Economy will no doubt be the main factor in pushing the compacts into contention for a major chunk of the fleet car market. However, the point of prestige could prove to be the toughest area of resistance, as borne out by several "human behavior" factors turned up in the PW survey.

Salesmen park them around the corner when calling on an important customer.

Executives leave them in the garage and take a cab to the golf course or country club.

High placed municipal officials

(*Turn to page* 38, *column* 1)

This Week's

Purchasing Perspective

FEB. 15-21

DETROIT SHOWROOM—What's happening in Detroit suddenly has pushed Pittsburgh, Gary, and Birmingham out of the industrial spotlight. With most steel inventories back to workable levels weeks ahead of schedule, the winter slowdown in auto sales has attracted more attention than ordinarily would be paid to the normal seasonal phenomenon.

Here's what bothers auto production planners:

January production totaled 689,000 units whereas sales, although up 25% from December, amounted to only 450,000. The lag pushed dealer inventories up to 800,000 cars—considered a workable figure; but if the February production goal of 728,000 cars is attained, dealers will have a March 1 inventory of one million.

A backlog of that size furrows many brows. It is especially worrisome to finance companies that bear the floor-planning risk. So, barring an unexpected spurt above the current daily selling rate of 19,000, a softening could be in sight.

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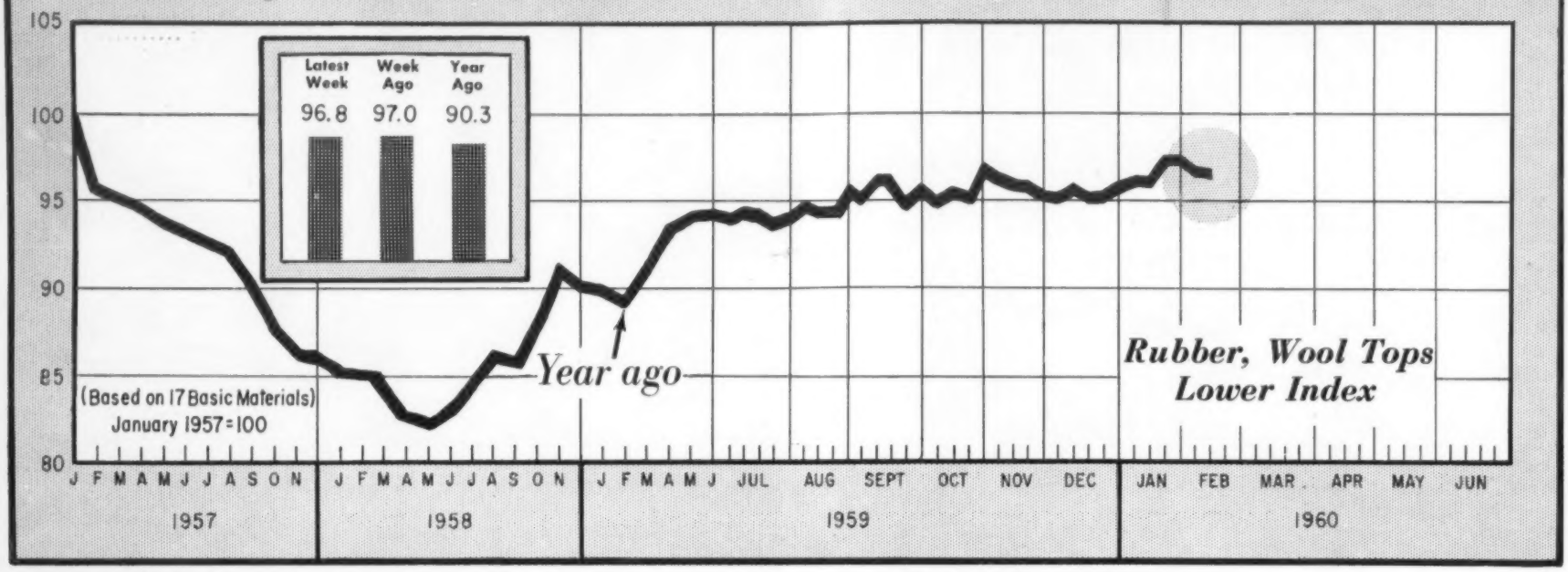
Steelmakers, while maintaining high production rates, last week had their fingers crossed against revisions in auto orders.

(*Turn to page* 37, *column* 1)

Purchasing Week Industrial Materials Price Barometer

This index, based on 17 basic materials, was especially designed by the McGraw-Hill Department of Economics.



This Week's Commodity Prices

	Feb. 10	Feb. 3	Year Ago	% Yrly Change
METALS				
Pig iron, Bessemer, Pitts., gross ton	**67.00**	67.00	67.00	**0**
Pig iron, basic, valley, gross ton	**66.00**	66.00	66.00	**0**
Steel, billets, Pitts., net ton	**80.00**	80.00	80.00	**0**
Steel, structural shapes, Pitts., cwt	**5.50**	5.50	5.50	**0**
Steel, structural shapes, Los Angeles, cwt	**6.20**	6.20	6.20	**0**
Steel, bars, del., Phila., cwt	**5.975**	5.975	5.975	**0**
Steel, bars, Pitts., cwt	**5.675**	5.675	5.675	**0**
Steel, plates, Chicago, cwt	**5.30**	5.30	5.30	**0**
Steel scrap, #1 heavy, del. Pitts., gross ton	**43.00**	43.00	43.00	**0**
Steel scrap, #1 heavy, del. Cleve., gross ton	**43.00**	43.00	43.00	**0**
Steel scrap, #1 heavy, del. Chicago, gross ton	**40.00**	41.00	44.00	**— 9.1**
Aluminum, pig, lb	**.26**	.26	.247	**+ 5.3**
Secondary aluminum, #380 lb	**.25**	.25	.218	**+14.7**
Copper, electrolytic, wire bars, refinery, lb	**.331**	.331	.296	**+11.8**
Copper scrap, #2, smelters price, lb	**.26**	.26	.243	**+ 7.0**
Lead, common, N.Y., lb	**.12**	.12	.115	**+ 4.3**
Nickel, electrolytic, producers, lb	**.74**	.74	.74	**0**
Nickel, electrolytic, dealers, lb	**.74**	.74	.74	**0**
Tin, Straits, N.Y. lb	**1.01**	1.00	1.02	**— 1.0**
Zinc, Prime West, East St. Louis, lb	**.13**	.13	.115	**+13.0**
FUELS†				
Fuel oil #6 or Bunker C, Gulf, bbl	**2.00**	2.00	2.00	**0**
Fuel oil #6 or Bunker C, N.Y. barge, bbl	**2.37**	2.37	2.37	**0**
Heavy fuel, PS 400, Los Angeles, rack, bbl	**2.15**	2.15	2.15	**0**
Lp-Gas, Propane, Okla. tank cars, gal	**.05**	.05	.055	**— 9.1**
Gasoline, 91 oct. reg., Chicago, tank car, gal	**.11**	.11	.115	**— 4.3**
Gasoline, 84 oct. reg., Los Angeles, rack, gal	**.107**	.107	.12	**—10.8**
Kerosene, Gulf, Cargoes, gal	**.095**	.095	.104	**— 8.7**
Heating oil #2, Chicago, bulk, gal	**.094**	.094	.11	**—14.5**
CHEMICALS				
Ammonia, anhydros, refrigeration, tanks, ton	**90.50**	90.50	90.50	**0**
Benzene, petroleum, tanks, Houston, gal	**.34**	.34	.31	**+ 9.7**
Caustic soda, 76% solid, drums, carlots, cwt	**4.80**	4.80	4.80	**0**
Coconut, oil, inedible, crude, tanks, N.Y. lb	**.195**	.198	.208	**— 6.2**
Glycerine, synthetic, tanks, lb	**.293**	.293	.278	**+ 5.4**
Linseed oil, raw, in drums, carlots, lb	**.176**	.176	.163	**+ 8.0**
Phthalic anhydride, tanks, lb	**.165**	.165	.165	**0**
Polyethylene resin, high pressure molding, carlots, lb	**.325**	.325	.35	**— 7.1**
Rosin, W.G. grade, carlots, fob N.Y. cwt	**13.70**	13.70	9.85	**+39.1**
Shellac, T.N., N.Y. lb	**.31**	.31	.30	**+ 3.3**
Soda ash, 58%, light, carlots, cwt	**1.55**	1.55	1.55	**0**
Sulfur, crude, bulk, long ton	**23.50**	23.50	23.50	**0**
Sulfuric acid 66° commercial, tanks, ton	**22.35**	22.35	22.35	**0**
Tallow, inedible, fancy, tank cars, N.Y. lb	**.058**	.058	.073	**—21.5**
Titanium dioxide, anatase, reg. carlots, lb	**.255**	.255	.255	**0**
PAPER				
Book paper, A grade, Eng. finish, Untrimmed, carlots, cwt.	**17.20**	17.20	17.00	**+ 1.2**
Bond paper, #1 sulfite, water marked 20 lb, car. lots, cwt.	**25.20**	25.20	24.20	**+ 4.1**
Chipboard, del. N.Y., carlots, ton	**100.00**	100.00	100.00	**0**
Wrapping paper, std. Kraft, basis wt. 50 lb rolls	**9.25**	9.25	9.00	**+ 2.3**
Gummed sealing tape, #2, 60 lb basis, 600 ft. bundle	**6.30**	6.30	6.40	**— 1.6**
Old corrugated boxes, dealers, Chicago, ton	**20.00**	20.00	23.00	**—13.0**
BUILDING MATERIALS‡				
Cement, Portland, bulk carlots, fob New Orleans, bbl	**3.65**	3.65	3.65	**0**
Cement, Portland, bulk carlots, fob N.Y., bbl	**4.18**	4.18	4.29	**— 2.6**
Southern pine, 2x4, s4s, trucklots, fob N.Y., mftbm	**124.00**	124.00	120.00	**+ 3.3**
Douglas fir, 2x4, s4s, carlots, fob Chicago, mftbm	**138.00**	138.00	134.00	**+ 3.0**
Douglas fir, 2x4, s4s, carlots, fob Toronto, mftbm	**118.00**	118.00	112.00	**+ 5.4**
TEXTILES				
Burlap, 10 oz. 40", N.Y., yd	**.105**	.105	.106	**— .9**
Cotton middling, 1", N.Y., lb	**.332**	.332	.357	**— 7.0**
Printcloth, 39", 80x80, N.Y., spot, yd	**.222**	.222	.185	**+22.0**
Rayon twill 40½", 92x62, N.Y., yd	**.235**	.235	.22	**+ 6.8**
Wool tops, N.Y., lb	**1.495**	1.525	1.425	**+ 4.9**
HIDES AND RUBBER				
Hides, cow, light native, packers, Chicago, lb	**.235**	.235	.205	**+14.6**
Rubber, #1 std ribbed smoked sheets, N.Y., lb	**.394**	.402	.304	**+29.6**

† Source: Petroleum Week ‡ Source: Engineering News-Record

This Week's

Price Perspective

FEBRUARY 15-21

AS STEEL GOES so goes the whole economy.

An old business adage? Yes. But just as true today as ever.

A big portion of today's business activity, for example, can be directly traced to replenishment of stocks depleted by the steel stoppage.

Even more important—basic trends in wages, prices, spending, and growth owe much of their current character to developments in steel.

In fact, there's hardly a business area where steel—either directly or indirectly—does not cast a long shadow.

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TAKE WAGE COSTS

The steel settlement wound up with the companies paying an additional 3½%-4% more in hourly wages. The same percentage boost is now spreading through most other business areas.

In some cases, this is understandable because firms are dealing with the same union—United Steelworkers of America. Thus, several metal-using companies (mostly transportation equipment and auto part makers) recently have signed up with the USW on terms similar to "big steel."

But the trend applies to other unions as well—for most of labor takes its cue from steel. Result: "Steel-type" pacts are being considered in a lot of nonmetal areas.

Actually, this nationwide 4% boost that's shaping up is not so bad as it appears to be at first glance. For, while somewhat above the 2% figure reported in 1959, it's quite moderate by most postwar standards.

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TAKE PRICE TRENDS

Steel prices remain steady. In fact, if you want to split hairs and consider warehouse tags, then the over-all purchase price of steel has actually eased a bit in the past month or so.

Other industrial prices have followed suit. They've generally tended to follow the relatively stable steel price pattern.

There are exceptions, of course. These are basically firms that find themselves in a cost-price vise—and cannot absorb even the mild 4% labor cost increase noted above. The recent boosts in farm equipment would fall into this category.

But luckily, these companies are in the minority. As in the case of steel—increased productivity has convinced most firms to forego price hikes at this time.

Many of these latter firms may hold the line even if steel tags are raised in late 1960. Reasons: **1.** Steel boost probably will be small. **2.** Business growth may be peaking out by then—and that's hardly a time for hikes.

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THEN THERE'S INDUSTRIAL OUTPUT

Again, we see the correlation between steel and the economy. Steel production is at record highs. So is over-all industrial production.

But here is where the first hint of trouble crops up. The big question: How long can steel continue to operate at current levels?

Some informed sources are already talking about a cutback this spring—unless orders pick up. They note that steel buying is running as high as 20-25% ahead of consumption, a situation that can't last indefinitely.

A steel output decline to below 80% of capacity in the second half would be the tipoff to a possible leveling off of the boom. Such a level would hardly be enough to sustain today's rapid rate of industrial growth.

Note: The above conclusion applies only to late 1960. It in no way affects the near-term forecast of continued growth. PURCHASING WEEK's regular quarterly review of leading business indicators (see page 4) points to continued uptrend through early summer.

PURCHASING WEEK is published weekly by McGraw-Hill Publishing Co., Inc., at 99 N. Broadway, Albany 1, N. Y. Second class postage paid at Albany, N. Y. Subscription $6 a year in U. S. A.

In Office Machines—High or Low Road?

To Boost Profits, Smith-Corona Stresses New Products, Underwood Sticks with Standard Items

New York—Two major office machine makers are heading down divergent paths in an effort to strengthen their sagging markets and boost profit margins on their products.

Smith-Corona Marchant, Inc., Syracuse, is placing its bets on new products—with strong emphasis on research and development.

Underwood Corp., New York, on the other hand, is cutting back on research and development. The firm, now in partnership with the Olivetti Co. of Italy, has broad plans designed to strengthen sales of its present product line—mainly standard typewriters.

Diversification Is Key

"We feel certain that the future growth of our company will be reflected in a diversified product line," a top Smith-Corona official told PURCHASING WEEK in discussing his company's approach.

"We are not getting out of the dog-eat-dog standard typewriter business," he explained. "Instead, we are trying to stabilize our markets there. Higher profit margins on new products, we think, will give us more elbow room in other areas and permit us to stop giving away our standard typewriters."

While Underwood was reluctant to discuss this "dog-eat-dog" market aspect, one official did admit that "this is our immediate problem."

New product research at Underwood's Hartford, Conn. facilities is being suspended and its present research staff of 170 employees is being reduced to less than 100. At the same time, production of standard typewriters there is being increased from 330 to 440 a day.

Increased Service Facilities

In addition, Underwood is converting the two top floors of the Hartford plant into a training center for mechanics. These floors were formerly used for applied research on electronic computers which is being curtailed in favor of expanded service facilities.

Smith-Corona's emphasis on new products, said one executive, "is just beginning to pay off." The company's earnings pattern, he pointed out, will show "a definite upswing" after the start of fiscal 1961—July 1—"a fair improvement" in the first quarter ending Sept. 30, and "a very marked increase" in the second three months.

New Photocopy Machine

The office equipment manufacturer plans to introduce a new photocopy machine sometime in May or June, a new line of data processing machines—not computers—around June, July, or August, and other new product developments after that.

As profits increase, the company will step up its research and development efforts. "We're in this all the way," the executive said.

Among the new products recently introduced by Smith-Corona are:

● **An electric portable typewriter.** The only one of its kind in the market, this product shows great promise as an office machine. The company has switched a good deal of its sales promotion in an effort to put this machine across.

● **A 10-key automatic calculator.** This machine is made by the company's Hamann Rechenmaschinen division in West Berlin. Shipments of the calculator started arriving in the U. S. last month.

● **The Skywriter.** This is the firm's lowest-priced typewriter model. It is manufactured by a subsidiary—British Typewriters, Ltd., of Great Britain—for worldwide marketing.

Typewriters, which currently account for about 40% of the company's dollar volume, are not being buried in this new product drive.

"We do intend to become less dependent on this end of our business, however," the Smith-Corona executive said. "And we will become so as more of our new products begin to carry their own weight.

"In the past, in order to do business in the tremendously competitive typewriter market, we sometimes had to give our machines away. Now we envision where we can become more choosy and have a much stronger pricing policy on typewriters.

"Let me add, however," the executive said in summation, "that we do not intend to ignore present or potential typewriter customers. We still want their business and will compete strongly for it."

Burlington Beats Union To Punch; Hikes Wages

New York—The nation's largest employer of textile workers, Burlington Industries, will beat the union to the punch this year by giving its workers a 5¢/hr. wage boost before contract-negotiation time comes up in April.

The wage hike, which will affect some 55,000 workers in Burlington's 114 plants, will go into effect "late in the first or early in the second quarter," J. Spencer Love, president and chairman of Burlington, told company stockholders.

Facts of Light!
CHAMPION Lamps
IT COSTS $77.50 per KW hour
to RUN A FLASHLIGHT
$.0266 per kw hour
$77.50 per kw hour
When a lamp is run on a flashlight battery the power cost is in the vicinity of $77.50 per KW hour. The power cost to operate lamps from residential electric supply is only 2.66 cents per KW hour.
SOMETIMES IT COSTS MORE TO OPERATE ONE FLUORESCENT THAN TO OPERATE TWO
When only one fluorescent lamp is operating on a lead-lag ballast designed to handle two lamps, more line curren can be drawn than if both lamps were operating. This is due to a shift in powe factor. Moral: keep all lamps operating —you can draw less current and get twice the light.
CHAMPION 150 WATT 125 V
CHAMPION 100 WATT 125 V
A LITTLE VARIATION IN VOLTAGE CAN MEAN A LOT IN THE LIFE OF A LAMP
Incandescent lamps are designed to yield maximum lighting economy when used on circuits where the voltage is the same as that printed on the bulb. When the circuit voltage is 5 volts above the bulb rating lamp life can be cut in half. A variation of 5 volts below rating can double lamp life.
YOUR NEW CHAMPION LAMP HAS ALREADY BEEN LIGHTED AT LEAST 7 TIMES
Every Champion lamp is lighted a minimum of 7 times before it is packaged. Checks like this are typical of the strict quality control maintained at Champion and one of the reasons why the Champion Diamond on the outside of a lamp means a dependable source of light on the inside.
CHAMPION LAMP WORKS, Lynn, Massachusetts
CHAMPION INCANDESCENT-FLUORESCENT • YOUR BEST BUY IN LAMPS

This Week's

Washington Perspective

FEB. 15-21

Politicians are just becoming aware of a fact well known to economic and population experts: that a big increase in the size of of the U. S. labor force during this decade will more than likely propel business expanision ahead at a much faster clip than previously—regardless of which party is in power.

The result is to undercut noticeably the Democratic thesis that greater government activity is needed to step up economic growth. Democrats had been charging that the Administration's policies had slowed the rate of business expansion over the past half dozen years considerably below the traditional 3% rate.

Democrats of the stripe of Leon Keyserling, former economic adviser to President Truman, had been arguing that a growth rate of between 4% and 5% was necessary to counter Russia's economic expansion and increase American standards of living. Republicans previously had been reluctant to enter into a numbers game with Democrats over the issue.

But the Nixon wing of the Administration turned the tables on Democrats. Labor Secretary James P. Mitchell, a close confidante of Vice President Nixon, put the Republicans on the side of a growth rate well in excess of 4% a year.

Mitchell last week issued a new report on the manpower outlook during the 1960's which showed a whopping big increase of young people, the product of the postwar baby boom, entering the labor force.

Mitchell's thesis was simplicity itself: A bigger labor force means more people at work turning out more goods. The growth rate was practically automatically assured, provided there was no big depression of the type that occurred during the 1930's.

The lesson was beginning to sink in on Democrats. The Joint Economic Committee put out a study several weeks ago, which was largely overlooked at the time, that reached approximately the same conclusions as Mitchell.

The result of these studies has been to narrow the field of arguments over economic growth.

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The Administration has decided to support a program of subsidies to the airlines to build up the nation's air cargo fleet.

Federal Aviation Administrator Elwood R. Quesada won out in an intra-Administration squabble with Pentagon officials over the matter. Air Force people had been concerned that such a program would undermine the Military Air Transport System (MATS).

The full details of the program are still to be worked out. But a clash over the proposal is certain to arise in Congress among MATS supporters.

Congress so far has been considering a more modest approach. Sen. Mike Monroney (D., Okla.) is sponsoring a bill that would have the government merely guarantee private loans to the airlines for building cargo ships.

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Congress has decided to extend for another year the antitrust moratorium on dual rate systems used by most ocean shipping conferences.

A Supreme Court decision of two years ago undermined the legality of such rate systems. Congress acted to prevent chaos in the shipping industry by enacting a two-year moratorium, preserving the status quo until it could complete a study on whether to exempt dual rates from antitrust laws permanently or to apply them only to specific cases.

But committees studying the issue cannot finish their work by the June 30 expiration date. So key legislators have reached an understanding to enact a one-year extension.

Weekly Production Records

	Latest Week	Week Ago	Year Ago
Steel ingot, thous tons	2,690	2,683*	2,371
Autos, units	165,367	173,231*	114,282
Trucks, units	29,129	32,638*	24,765
Crude runs, thous bbl, daily aver	8,199	8,149	8,025
Distillate fuel oil, thous bbl	13,696	13,570	15,009
Residual fuel oil, thous bbl	7,634	6,884	6,761
Gasoline, thous bbl	29,050	27,570	26,913
Petroleum refineries operating rate, %	84.0	83.8	83.2
Container board, tons	164,286	168,155	153,121
Boxboard, tons	96,914	102,012	95,134
Paper operating rate, %	96.1	96.2*	89.2
Lumber, thous of board ft	247,956	245,794	225,449
Bituminous coal, daily aver thous tons	1,478	1,442*	1,431
Electric power, million kilowatt hours	14,097	14,313	13,292
Eng const awards, mil $ Eng News-Rec	374.8	377.4	346.2

* Revised

Now Nine of 12 Indicators Are Pointing Up

LEADING INDICATORS	WHAT THEY PREDICT	Current Outlook	Outlook 3 Mos. Ago
P.W. Price Barometer	Imminent changes in over-all demand.	↑	→
P.W. Overtime Hour Index	The urgency of meeting delivery schedules.	↑	→
Day's Supply	Future inventory policy and trends.	↑	↑
Ratio: New Orders/Sales	Trend in manufacturing backlogs and hence business activity.	→	↑
Ratio: Stock/Orders	Effect of orders on production schedules.	↑	↑
Business Births	Opportunities available for new business.	↑	↑
Business Failures	Relative health of business community.	↑	↓
Industrial Stock Prices	Wall St. appraisal of business outlook.	↓	→
Plant & Equipment Spending	Future capital spending plans of the nation's businessmen.	↑	↑
Machine Tool Orders	Business feeling about future economic climate.	↑	↑
Construction Awards	Future over-all construction activity.	↓	↓
Housing Starts	Near-term residential building activity.	↑	↓

Omens Remain Promising for '60

(*Continued from page* 1)

goods on hand. That's well below the normal levels and an indication that future inventory accumulation is in the cards.

● **New order-sales ratio**—The latest data here is mixed. The new order component of this ratio has both an optimistic and pessimistic tinge. On the plus side is the $1.2 billion boost in bookings in December—the biggest jump in years.

On the negative side: This gain—big as it was—failed to restore incoming orders to the level prevailing last spring. For example, December new bookings for hard goods were close to 8% below the $16.1 billion racked up in July.

The ratio itself also is disappointing. A spurt in hard goods sales pushed shipments up to the new order level. Result: Backlog failed to increase for the first time in 7 months.

● **Inventory-new order ratio**—Here we see optimistic forces coming to the fore. The low ratio of inventory to new orders indicates a further production pickup. It generally means that new orders will have to be filled from new output rather than from inventory.

● **Machine tools**—Business attitudes, as measured by this barometer, seem to be only moderately optimistic. To be sure, the latest figures show orders some 34% above a year ago.

But it's important to remember that the year-ago levels were depressed. If the current order level continues all year, it would only add up to $750 million in new bookings—well below the level of the past boom when orders topped the $1 billion mark.

● **Business births and deaths**—Latest data on incorporations and failures are encouraging. More of the former and less of the latter attest to growing business opportunities and relative business health.

● **Construction** — Contracts signed have been falling through the past 5 months. And this is a pretty good sign that the construction boom is leveling out. But it's doubtful whether any sharp drop is likely. There's a lot of strength, for example, in factory and commercial contracts.

Moreover, housing starts after falling steadily from July peaks rallied in December to show a monthly gain of 8%. However, this renewed vigor would have to continue for several more months to warrant any sharp optimism in this sector.

Carbon Black Gets the Heave-Ho—Tinted Tires Are All Set to Roll

Akron, Ohio—Colored automobile tires become a commercial reality this spring.

Researchers at Columbia-Southern Chemical Corp. have developed a chemically-produced silica that can be used to reinforce rubber instead of carbon black. The white powdery silica enables rubber compounders to use colored pigments, something that can't be done when black serves as the reinforcing agent.

Several sets of bright red tires produced by Columbia-Southern are now being tested on sales and service cars of Coca Cola Co. in southern Indiana. Tentative plans call for the use of red tires on hundreds of the beverage firm's fountain service cars in the Southeastern states.

Columbia-Southern researchers have been conducting experiments for a number of years aimed at getting the silica into rubber products, especially tires. This effort led to the organization of a small rubber firm, Gehrig Rubber Manufacturing Corp., Portland, Indiana. This company plans to begin commercial production of colored tires within two months.

R. L. Gehrig, who heads the firm, sees specialty tires of various colors used on small bakery, dairy and brewery trucks as well as by owners of foreign cars and compact American autos.

Cotton Interests Want Tariff Help

Washington—Southern congressmen, backed by the Republican leadership in the Senate and House have asked President Eisenhower to broaden a pending Tariff Commission study of cotton textile imports.

As part of a continuing campaign for increased tariff and quota protection against import competition, domestic textile mills recently won support from the National Cotton Council.

The Council filed a petition for the Tariff Commission study of textile imports on grounds they were undermining the Agriculture Dept.'s domestic program of export subsidies for raw cotton.

The legislators are after the President to request the commission to consider specifically the impact of imports on domestic mills, as well as on the cotton export price support subsidy.

WHY NOT THIS?

COPE WIREWAY CABLE SUPPORTING SYSTEMS SAVE "3 WAYS" OVER "TRADITIONAL" MATERIALS

Why pay a premium for your cable supporting equipment—when Cope Wireway offers a *completely integrated system* for much less. Compare these facts for yourself.

- ***Lower material cost—***
  One section of 24″ wide Wireway supports *as many cables* as 16 lengths of 4″ conduit—at only 1/10th the weight. That means you're buying much less materials regardless of the size of the job.
- ***Less to install—***
  Wireway's lightweight and unique coupling method, speeds joining of straight lengths and fittings—even in close quarters. A Cope system comes *complete* with all necessary accessories—ready to go.
- ***Built-in expansibility—***
  With Wireway, you need not be concerned about costly re-routing or later additions to your system. Cables are always readily accessible and Cope's pin type couplers can be quickly disconnected to permit change in direction or elevation.

Ask for proof! *See your authorized Cope Electrical Wholesaler* for more information on economical Cope Wireway—in either aluminum or hot dipped galvanized steel. Or write us direct.

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Formulas Can Help You Beat Price Increases by Sharpening

Basic Formula for Buying Ahead on Inventory When Expecting a Price Rise:

$$\text{No. of Mos. Ahead} = \frac{\text{Savings per Month}}{\text{Monthly Increase in Carrying Costs}}$$

How do prospective price increases affect your purchasing plans?

• Do you buy ahead—and how much?

• What factors do you consider?

To help handle these inventory problems, a growing number of P.A.'s are turning to mathematical formulas—or some technique based on a formula—or are looking around for one.

Almost all the formulas worked up by P.A.'s, or offered by management consultant firms, are derived from the equation (left).

It looks fairly simple. According to the formula—if you want to know how far ahead to buy all you have to do is divide calculated savings per month by the monthly increase in carrying costs.

Finding the savings per month is easy. Just multiply the pending price increase times a month's supply of the commodity under consideration.

But getting a figure for the item "Monthly Increase in Carrying Costs" is a more difficult matter. There are so many variables—increased handling costs, storage charges, delivery costs, interest on money borrowed for the additional purchase, etc., etc.—that many P.A.'s throw up their hands at this point.

How Formulas Work

Many formulas — including some commercially marketed ones—use some more or less arbitrary, straight percentage increase of inventory carrying costs as their additional cost factor. Others simply apply their general inventory carrying costs percentage to the additional inventory.

For example, if inventory carrying costs are figured at 1½% a month (18% a year), and the expected price rise is 6%, then the months-ahead-order would be calculated as:

$$\frac{.06 \times \text{month's-addition-to-inventory}}{.015 \times \text{month's-addition to-inventory}}$$

The month's addition-to-inventory cancels out and we end up with

$$\frac{.06}{.015}$$

—or 4 months ahead-order for this item.

Some P.A.'s have come up with ingenious simplifications of the knotty "Increased Carrying Costs" problem. One Northwestern company divides its monthly savings by 2% of the cost of the additional inventory. Its reasoning: The company figures it must make at least 25% a year on the money it spends for additional inventory. (25% divided by 12 months is, roughly, 2%.)

Different Methods Used

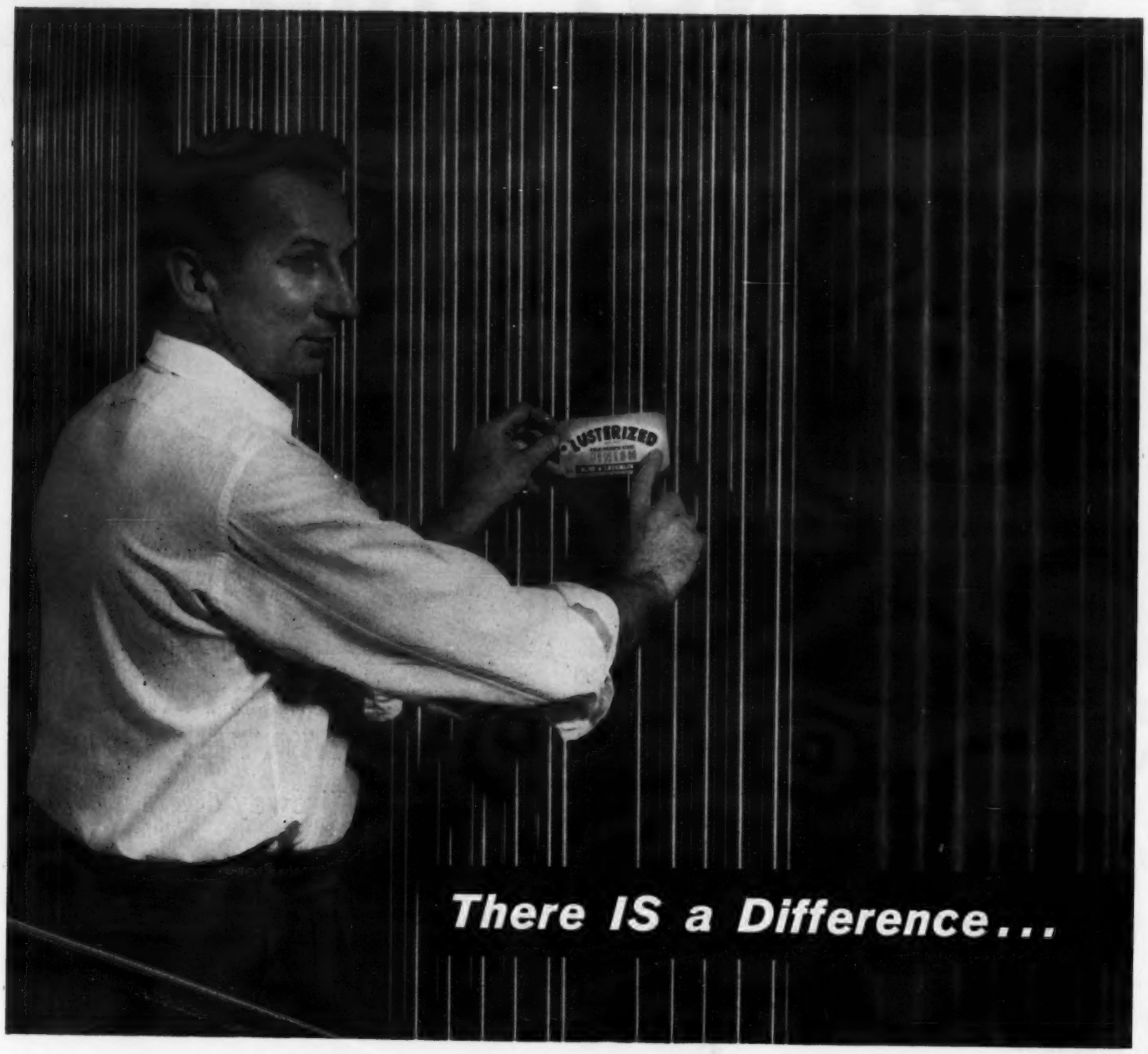
The P.A. of a Southern pen manufacturing company divides his savings by the "per-foot rental value of the warehouse space that we'll need for the commodity" to find out how far ahead to buy.

The P.A. for a Midwest chemical firm dispenses with both cost and savings figures. For ordinary price increases he stocks up a 3-month supply plus 20%. If the expected price increase is low, this amount is scaled down; if high, it's scaled up.

Most of the formulas used, however, try to break the increased costs down in detail. This makes them more complex.

One Midwest automotive supplier uses different formulas for each item and puts them through an IBM machine. Each ahead-order is figured out on the basis of: the amount of the price increase, the amount of the item usually purchased, and an estimate of how much the company sales will increase over the time of the forward purchase.

For this company the timing of the price increase is important. Because a car model year runs from August 1 to July 31, an increase occurring near the middle of the year is covered only to July 31, while a price rise in January may result in a forward order through June if savings warrant.



...a BIG DIFFERENCE in Cold Drawn Bars

Contrary to popular belief, all cold drawn bar steel is not alike. There is one big difference worthy of your specification—the Bliss & Laughlin difference.

Only B&L Lusterized® cold finished bars are different from all others. B&L bar steel is cleaner, brighter, easier to handle. The exclusive B&L cold finishing process (patent applied for) removes drawing oils, lime and processing grit, producing a smooth, gleaming bright surface without processing contaminants to slow your production. And B&L special protective oil keeps dirt, dust and other airborne contaminants from the Lusterized surface until you are ready to process the bars.

This big difference over other cold finished bar steel is another benefit developed from B&L research since 1891 to produce better cold finished bars.

You can see the difference. You can work the difference advantageously. Since you pay nothing extra for B&L Lusterized bars, it is always rewarding for you to specify "Bliss & Laughlin Lusterized."

Originators of LUSTERIZED® Finish—The BIG DIFFERENCE in Cold Drawn Bar Steel

BLISS & LAUGHLIN

GENERAL OFFICES: Harvey, Ill. • PLANTS: Harvey, Detroit, Buffalo, Mansfield, Mass.

Specialists in Finish, Accuracy, Straightness, Strength and Machinability

Your Buy-Ahead Planning

Timing a Critical Factor

The P.A. of a Georgia firm also finds timing a determining factor. "We're much more inclined to stock up in advance of a price increase that comes in the early or middle part of the year. Otherwise, we have to figure ad valorem taxes of 4 to 4½% in our increased costs. We're reluctant to hedge against even a 10% price rise later in the year. We want to avoid being too heavily stocked at the first of the year when taxes must be paid on inventory on hand then?

Use of Calculators

Another Midwestern firm, a tool company, uses a Van D. Mark Purchasing Calculator. This helps figure out costs involved in warehousing, delivery, lead time, ordering, order processing time, and other regular purchasing expenses. It is a plastic, wheel-spinning type disc, with unit prices, monthly-usage scales, order-cost and correct-ordering-quantity scales on the wheels. The calculator is set to a given inventory carrying cost percentage, then spun, and the desired figures appear in slots on its face.

There are a number of these systems and calculators in wide use among P.A.'s. One of the most popular is the Forward Buying Guide Nomograph put out by the Minneapolis-Honeywell Regulator Company (see PW, July 6, '59, p. 17).

But before any of these intricate systems or calculators can be used, one strategic fact must be determined: How great the anticipated price rise will be. Most P.A.'s say they are notified by suppliers in advance, but often they don't have enough time to calculate and prepare maximum forward orders. Some P.A.'s estimate future price increases by:

- **Following the market closely.**
- **Sending out queries on price prospects to suppliers.**
- **Utilizing information received from their own buyers.**

The formula approach to inventory control has two main advantages, according to P.A.'s:

- **It maximizes savings on inventory.**
- **It provides more stability in inventory management than a rule-of-thumb approach.**

But the formula is considered strictly a tool to help with inventory decisions. None of the P.A.'s queried by PURCHASING WEEK acted solely on the basis of their formulas. Some of the considerations weighed along with the formula answers are:

- **Current inventory situation.**
- **Outlook for company sales.**
- **Space available for warehousing.**
- **How far ahead the commodity considered will be used.**
- **Amount of money available.**

Most companies set maximum time limits to forward ordering in order to avoid undue inventory speculation. Others limit the use of formulas to a restricted number of the materials they inventory.

Users in a Minority

Despite the growth of and interest in formulas, the P.A.'s actually using them are still in the minority. They far outnumber, however, the small group of P.A.'s who take no action regardless of the price increase expected.

This latter group ignores price movements either because the decisions for usual inventory ahead-orders are made by higher management, or because they are committed to an inventory system rigidly geared to maintaining a predetermined flow of materials into production.

A case in point is one West Coast firm whose P.A. stated, "Our policy is to stick to a 60-day inventory on production materials, 30-day on nonproduction materials."

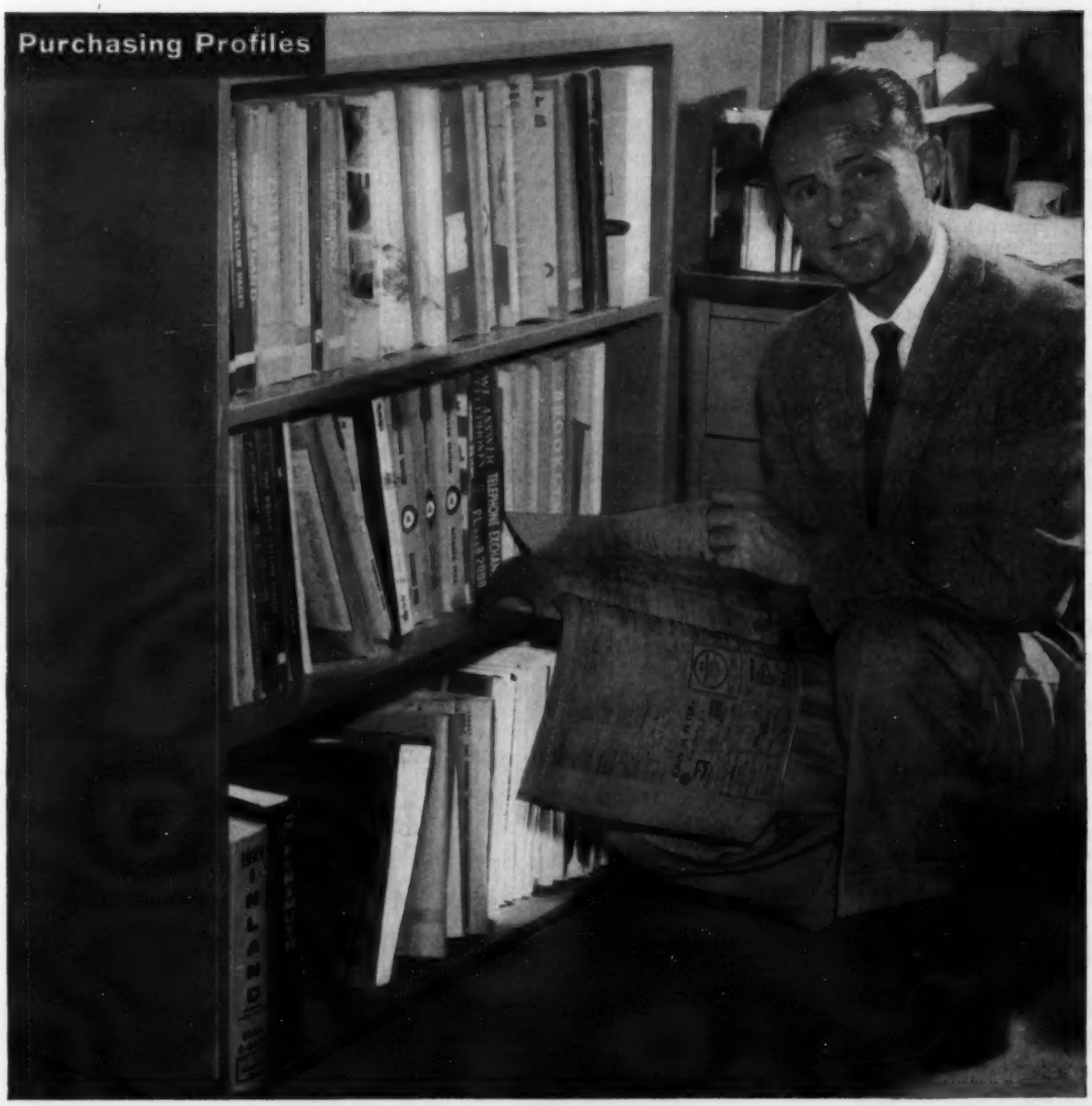
By far the great majority of P.A.'s, PURCHASING WEEK found, estimated their ahead-orders by rule of thumb judgment derived through experience.

Savings VS Costs

The thinking of most of this group paralleled the formula method: They weighed savings to be made against approximations of increased costs. Many of them were looking for more exact techniques.

A number of them felt that a formula, while desirable, was impractical because of such variables as:

- **Deterioration of the material stocked.**
- **Savings that might accrue if the money were used elsewhere.**
- **Varying costs caused by using a wide variety of materials.**
- **Obsolescence of item.**
- **Different rates of turnover for items.**
- **Frequent changes in customer purchases.**
- **Possibility of price cuts following price increases.**
- **Design and cost changes.**



"Our buyers make good use of our Yellow Pages library"

says A. B. Rooker, General Purchasing Agent, Tucson Division of Hughes Aircraft Company, Tucson, Arizona

"We all rely on our library of Yellow Pages directories for principal U.S. cities to help us find sources of supply in a hurry. And by looking under appropriate Yellow Pages headings, we make certain we're going to the appropriate divisions of the diversified companies we deal with. Thus the Classified Directory saves us buying time, makes suppliers for practically anything we need immediately available."

It pays in so many ways to build a library of Yellow Pages directories! Helps you locate a wide variety of supplies *fast!* Helps you locate supplies right in the area where they're needed! Are *you* taking full advantage of this dependable guide for busy buyers? Use the Yellow Pages for all your requirements and get your job done faster!

America's Buying Guide For Over 60 Years!

Find it Fast In The Yellow Pages

Salt Lake Goes Ahead and Buys Same Water Pipe

Salt Lake City—Finance Commissioner Theodore I. Geurts has decided to keep the water pipe that washed city P.A. Leslie E. Broberg out of his purchasing job last month.

Broberg, who listed "poor health" as the official reason for his resignation, came under heavy fire from Mayor J. Bracken Lee, when the water pipe purchase was made without asking for competitive bids.

Won on Time

When Geurts, however, got new bids from eight firms who handle the cement-asbestos pipe, the Finance Commissioner found that Johns-Mansville Corp., San Francisco, supplier of the original pipe, won the contract because of delivery time.

While two other firms submitted identical low bids, Mansville won the contract "going away" with a delivery date of "one hour," compared to the three-to seven-day periods quoted by competitors.

In addition, Commissioner Geurts said it would cost the city $2,416 for freight and handling charges to return the purchased pipe to the Mansville factory.

Meanwhile, the city commission unanimously approved the appointment of Kingsley E. Clauson, Mayor Lee's campaign manager in last fall's city election, as the new Salt Lake purchasing agent.

Florida Pushes New Rule On Price Fixing Through; Aims at Printing Vendors

Tallahassee—The State Purchasing Commission moved to wipe out alleged price fixing in the printing industry here last week by adopting a tough new anti-collusion regulation.

The new law, which was pushed through a reluctant cabinet by Gov. Le Roy Collins, put printers on immediate notice that they faced permanent loss of all state printing jobs if they conspired in any way on their bids to eliminate free, open competition for business.

An Extra Precaution

While some cabinet members had contended that the state's anti-trust law was sufficient protection against collusive bidding, Collins insisted upon passage of the new rule because of recent newspaper disclosures of irregularities in state printing purchases.

At the same time, the Cabinet also adopted a rule that bids submitted by separate firms under the same management must be considered as a single bid.

Single Contract

In a third action, the cabinet authorized State Purchasing Agent Dan d'Alemberte to negotiate a single contract for buying enamel and ink for 1961 auto tags. The single contract method replaces the old competitive bid system, which d'Alemberte said, had resulted in an incompatibility of low-bid ink with the low-bid enamel, each of which came from two separate companies.

Government Comptroller Asks Closer Scrutiny

Washington—The U. S. Comptroller General's office has asked the Army to make sure government contractors exercise closer control over subcontracts so the government will not get stuck with "unusually high prices."

After a study of subcontracts let by Douglas Aircraft Co. of Santa Monica, Calif. on its Nike missiles work, the comptroller general concluded that Douglas "accepted prices from its suppliers under fixed-price purchase orders which were "unreasonably high" in relation to earlier purchase orders. Because Douglas' own contract was subject to re-determination, the government eventually paid the difference.

Investigators said Douglas was unaware of the "substantial differences" between earlier experienced costs and purchase order prices from Aerojet-General Corp., Radiaphone Co. and J. C. Peacock Machine Co. because it did not require any cost data. The purchases were made under conditions of very limited competition, the report of the general accounting office pointed out.

The comptroller general recommended that wherever significant amounts are involved the Army should require the contractor to get data on prior costs from suppliers and obtain explanations for any increase, then evaluate prices in relation to other known costs.

He noted this is necessary because the contractor, if he can pass on costs to the government, has no incentive to supervise subcontract pricing closely.

In a partial defense of its buying operations, Pentagon officials told a Senate Armed Services subcommittee last week that Congress itself has granted 17 exceptions to the requirement that military buying must be through advertisement for bids.

J. Phelan, assistant director for procurement policy, said that some of these exceptions were written into the law more than 100 years ago—several of them originating about the time of the civil war.

O-B VALVES
Why buy more valve than you need?
Are you using 150 and 200 pound bronze valves on lines carrying 125 pounds steam? Do you believe that quality bronze valves aren't available below 150 pounds steam pressure?
Take a look at these Nos. 1501 and 1502 O-B globe and angle valves. They are the answer to your problem and can save you money. They have all the quality features found in higher pressure (and higher priced) valves... packing gland inside the packing nut... two-piece stem and disc holder construction... backseating design for repacking under pressure... heavy body, neck and bonnet.
Why take on the added expense of using heavier valves when O-B valves can do the job for you at lower cost? Ask your O-B distributor about these valves, or write to OHIO BRASS COMPANY, MANSFIELD, OHIO
B
HOLAN
4995-V

Sterile Assembly Area Rebuffs All Dust, Dirt

San Francisco—A $30,000 "clean room" may pay off in greater bidding power on defense subcontracts for Victor Equipment Co.

Victor, which makes welding and cutting equipment and components, recently subcontracted for the manufacture of high pressure gas regulators used in missile ground support complexes. Cleanliness specifications were so tight that Victor built a special 25 by 40-ft. room (see photo, right) for final cleaning, assembling, testing, and packaging of the regulators.

The "clean room" is a separate prefabricated chamber, installed in the company's warehouse. Temperature, humidity, and pressure are under constant control.

All air passing into the room is filtered to the extent of 90% of all 5-micron particles. One-fifth of the air is changed every 20 minutes by means of a draftless blower system.

The room is kept at slightly higher-than-normal air pressure to prevent contaminants (such as dust particles) from "leaking" in. The higher pressure is not noticeable to workers in the room, however.

Parts are passed into the room through one of two airlocks. They are first immersed in a Narda ultrasonic washer, where a filtered solution of Oakite 61A removes foreign matter from all surfaces, threads, and passages to the jogging of sound waves. Parts are then dried in a dry nitrogen blast at 140 F.

The parts are washed again and dried, and checked for grease particles under ultraviolet light. If they don't pass, they go back to the degreasing bath. Then the parts are assembled — also in strict cleanliness—and packaged in plastic bags which are sealed thermally.

Fred Stettner, Victor's vice president for engineering and production, said the facility has already been certified by Convair and Douglas. He expects other prime certifications shortly, he said.

THESE WHITE-COATED men are performing a major operation — on products, not people—at Victor Equipment Co.'s unique "clean room".

G. E. Cuts Price Of Both Diodes And Capacitors

New York — General Electric Co. announced price slashes in two important products of the communications industry — secondary network capacitor equipment and tunnel diodes.

Improved materials and new manufacturing techniques were given as the reasons for a 20% cut on capacitor equipments. The reduction in this area means that the price of 120 kilovar, 216 volt wye-connected equipment is now approximately $16-20 per kvar lower.

GE expects that the new low price for network capacitor equipments, coupled with the mounting cost of network distribution systems in metropolitan areas, will encourage a far greater use of these capacitors with low-voltage networks.

The network capacitor cuts came on top of an 83% price slash on germanium tunnel diodes, which will now sell for $10 and $12 instead of the original $60 and $75/unit prices.

The price reduction is a result of recent initiation of mass production of the new electronic part, which is similar to a transistor. The tunnel diode, however, is designed for much higher frequencies than the transistor.

Austrian Firm Wins Job On Denver's Dillon Dam, Underbids 5 Companies

Denver—The Denver Water Board recently purchased equipment for the Dillon Dam at $97,690 under engineering estimates by accepting a low bid from an Austrian firm.

Engineers had estimated the cost of the equipment at $230,000. The bid of $132,310 by Vereinigte Osterreichische Eisen- und Stahlwerke, A.G., of Linz Donau, Austria, was lower than bids from five U. S. competitors. The bid contract was for control gates, conduit liner sections, and a hydraulic power unit.

FLYING HIGH
...ON A ROUND TRIP
TICKET!
Aero-Pak and Dennison teamwork
combines selling and reordering
in one double-duty tag!
CONSUMERS ARE SOLD by a smart presentation of features and benefits. DEALERS ARE SOLD by an automatic reorder ticket that saves work.

Ideas make tags work twice as hard! Aero-Pak's double-duty tag not only illustrates the line but also includes an automatic reorder ticket that makes dealers steady repeaters. Variable information on the back is printed by Addressograph plates. This is only one of hundreds of extra values in Dennison's idea file. And, when you add ideas to tags, you add nothing extra to their cost.

Add extra value to your next tags . . . idea-wise, design-wise, quality-wise, cost-wise . . . by adding Dennison to your merchandising team. We can help you tailor your tags to any informative or promotional task . . . as we have done for America's top merchandisers. Creative suggestions and cost quotations are yours for the asking. Let's get together soon.

P.S. Other extra Dennison values include: equipment for imprinting variable information; the broadest range of tag-fastening devices; family-designed labels for any surface.

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FRAMINGHAM, MASSACHUSETTS

Offices in Principal Cities.

P/W MANAGEMENT MEMOS

A collection of timely tips, quotations, and inside slants on management and industrial developments, along with a run-down of events and trends of use to the purchasing agent.

Managers Today, Misfits Tomorrow?

What's the caliber of management men today? What's the outlook for the future? Good, say most observers. Not so good, says a small minority. One of the dissenters is Lester R. Bittel, who edits McGraw-Hill's Factory magazine and has written wisely on management problems. Looking at managers of today through the eyes of a mythical president, here is his picture:

> **"About one-sixth of my management team is top flight. These men have drive and potential. They are the leaders for tomorrow. About two-thirds of my organization are solid, dependable men. They're not outstanding, but they are the backbone of our company. But, I'll have to admit that about one-sixth of our managers are truly second-rate. They are the misfits who never should have been managers—the men who create and perpetuate most of our problems."**

But of the future? The top manager of 1970 speaks:

> **"One-sixth of my management team is still top flight. These fellows have the flexibility, initiative, and know-how to roll with the punches. They are still on top of their jobs. But now, not only the bottom sixth of my organization, but the solid middle block of managers, are rapidly becoming misfits. These reliable managers are now beginning to create and perpetuate problems in our organization."**

Will you be in that bottom five-sixths? Says Bittel—not if you keep abreast of the four changes that are reshaping management techniques: (1) more automation (2) more complex staff-line relationships; (3) the need to direct security-oriented employees; and (4) greater dollar value of management decisions.

Much Too Secret

A cost reduction specialist has criticized American industry for keeping cost-cutting ideas top secret. And, says H. Clifton Morse, Chicago management consultant, our products are more expensive than foreign goods in large part because of bad communications.

> **"Thousands of cost-saving methods are being practiced in foreign lands, but few American companies have thought of collecting and reviewing them."**

Morse recommends an idea exchange, or a methods clearinghouse. "Industry has a patriotic duty to freely exchange money-saving methods, whether they are in materials handling, manufacturing, administration, or elsewhere. I don't propose giving away trade secrets, but many ideas and much information is overclassified and restricted without warrant."

Budget Surplus—How It Works

Most people speak of a government budget surplus as a deflationary force because it takes money out of circulation. But that isn't the way it really works. A budget surplus causes deflationary pressure because it slows down the speed with which money gets spent.

> **Imagine the government account as a bank deposit on which Uncle Sam can draw to pay his expenses. A surplus means that more money is going into the account than the government is taking out. Because the surplus comes from all Americans (by way of taxes), Uncle Sam's deposit goes up while the deposits of corporations and individual citizens—you for instance— go down. Up to this point, there's been no change in the amount of money.**

Uncle Sam will use his surplus to pay off some of his debts. He retires government bonds held by private investor banks, and insurance companies.

As his deposit account goes down, the deposits of ex-bond holders go up. The money Uncle Sam pays to investors to retire his bonds enables them to make additional loans or investments.

But the fact that more money is available for loans doesn't mean more loans will be made. Just the opposite happens; the rate of lending slows down. Reason: The government is using a smaller proportion of its income to consume new goods and services, a large part to pay for goods and services already consumed (like war armaments). Part of current demand is removed, so private business is less eager to borrow money to expand further.

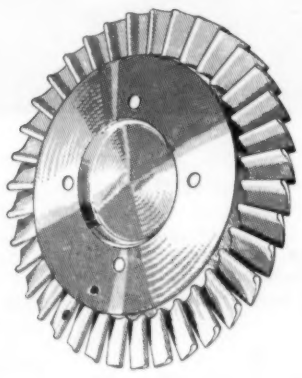
Also the circulation of money slows down further because the big private investors in government bonds are wealthier than the taxpayers as a whole. They save more—which is to say they spend less quickly.

Thus with a budget surplus, the amount of money in the system remains the same, but is circulated more slowly. That's the deflationary effect.

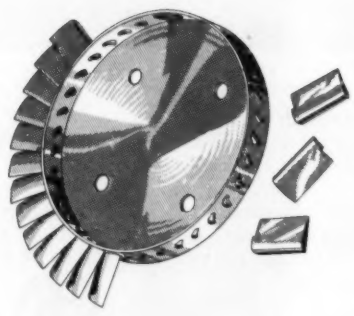
Short Pointer

A prominent Southern purchasing man recently described the trouble with committee management this way: "Yes, we had a purchasing committee system for a while, but by the time we got everyone on the committee to agree on what make of equipment we were going to buy, the equipment was obsolete."

WHAT VALUE ANALYSIS CAN DO FOR YOU



BEFORE ANALYSIS: Entire rotor was forged as a unit, required costly and tricky machining. One slip could ruin everything.



AFTER ANALYSIS: Parts are forged separately, then brazed together. This permits greater flexibility in manufacturing, reduces costliness of errors.

TECHNIQUE:
Redesign the part to use a less costly manufacturing process.

SAVINGS:
Part cost reduced 80%.

Source: Wall Colmonoy Corp., Detroit, Mich.

Purchasing Week

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Vol. 3, No. 7 February 15, 1960

PURCHASING WEEK is published weekly by the McGraw-Hill Publishing Co., Inc., James H. McGraw (1860-1948), Founder. Publication Office, 99-129 North Broadway, Albany 1, N. Y. See panel below for directions regarding subscriptions or change of address.

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United States subscription rate for individuals in the field of the publication, $6.00 per year, single copies 50 cents; foreign $25 per year, payable in advance. Printed in U.S.A. Title registered in U. S. Patent Office.

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What is your biggest gripe about suppliers?

C. F. Bain, purchasing agent, Smith & Loveless, Div., Union Tank Car Co. (water & sewage treatment equipment), Lenexa, Kan.:

"We know thousands of dollars are spent acquainting prospective customers with products; then the ball is dropped when firms fail to properly train the very person who in most cases makes the final and important contact—the inside salesman. This person should have personality; he must have initiative; he must be imaginative and above all must know his product."

C. J. Seelig, purchasing agent, G. M. Ketcham Mfg. Corp. (shower doors, etc), Glendale, L. I., N. Y.:

"Their failure to acknowledge all the information requested on the purchase order. Many times the acknowledgment copy received from the vendor—which is a duplication of our order—does not include definite delivery dates and prices. As a result, our expediter has to telephone or send a wire requesting such data."

J. F. Ward, purchasing agent, City of Chicago:

"Many suppliers seek to be placed on our bidders' list and when they are accepted assume the attitude that their sales can be conducted by a 'mail order business.' Suppliers should send technically trained sales personnel to the consumer to determine the end use to which their products are to be put and offer guidance in their use. Many companies have failed in this follow up."

J. W. Humphreys, purchasing agent, Corn Belt Power Cooperative, Humboldt, Iowa:

"The biggest gripe I can register is not necessarily against the supplier but against his representative who promises deliveries which are not made. Delivery dates that are not met cause us delays which disrupt our work schedules and at times have necessitated revamping long range plans."

Thomas Kadien, puchasing agent, Zeckendorf Hotels Corp., New York:

"Their failure to read and conform to the instructions printed on our price inquiry and purchase order forms is our biggest gripe. Since a hotel chain deals with many types of suppliers, we must require conformance with our own regulations as it is impossible for us to conform to the customs of any one of these groups."

O. A. Cyr, purchasing agent, Bridgeport Metal Goods Mfg. Co., Bridgeport, Conn.:

"The delay caused in our production planning and sometimes our production through suppliers' lack of consideration in not returning our telephone calls promptly. The fact that it is at times difficult to reach the proper party on the pretext that he is in conference and cannot be disturbed is also inexcusable. This only injures the company's reputation."

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This Changing Purchasing Profession . . .

Pittsburgh—A number of purchasing changes have been made by **United States Steel Corp.**

J. D. Peters and **S. T. Johnson** have been named assistant directors of purchases. They replace **R. D. Crowley** and **C. H. Baringer** who retired.

Crowley has moved up to director of purchases, Columbia-Geneva Div., San Francisco, succeeding **H. W. Christensen.** Christensen was made assistant to the division's executive vice president.

J. G. Hepler, assistant director of purchases, **National Tube Div.,** becomes assistant to the vice president-purchases.

The mill supply and office supply sections have been merged into the production supplies section, while raw materials and certain domestic purchases for foreign operations have been combined into the raw materials section. The following appointments were announced in the reorganization:

Raw materials section—E. G. Barrett, purchasing agent; **J. E. Hanley,** assistant purchasing agent; **J. G. Hess,** assistant purchasing agent; **D. M. Thomas,** assistant purchasing agent;

Production supplies section—**S. Parey,** purchasing agent, **S. A. Witt,** assistant purchasing agent, **J. A. Wrieth,** assistant purchasing agent;

Electrical and mechanical equipment section—**R. F. Dyson,** purchasing agent, **L. J. Camp,** assistant purchasing agent, **D. V. Pritchard,** assistant purchasing agent.

R. L. Weed has been named materials president in charge of the purchases di-standards officer by **Chesapeake & Ohio Railway,** the purchasing and stores department at Huntington, W. Va.

John K. Parks, former purchasing executive, was made a vice president of **Metal & Thermit Corp.,** Rahway, N. J. Parks, who will continue as general manager of the Detinning Div., had previously served as director of purchases and traffic.

F. Albert Hayes, PW's consulting editor, has been appointed a guest lecturer, the School of Executive Development, New Haven College. The school offers courses in the basic elements of purchasing and advanced purchasing in cooperation with the Purchasing Agents Association of Connecticut. Hayes is giving the advanced course.

Follow Up:

Letters and Comments

More Answers

Hamilton, Ontario

Re "Should purchasing agents set aside certain days and hours for salesmen's calls?" (PW, Jan. 25, '60, p. 11).

The enclosed card is distributed by our purchasing department:

"We extend a friendly welcome to sales representatives and other visitors.

"If convenient, please endeavour to minimize calls on Mondays and Fridays.

"Please try to arrange interviews between the hours of 10 a.m. to 12 noon and 1 p.m. to 3 p.m. on other days. Circumstances warrant more or less elasticity in these requests, but your cooperation will be appreciated."

O. D. Southwick
Vice President—Purchasing
National Steel Car Corp., Ltd.

Middletown, Conn.

Re "To what extent should local sources be given preference in the selection of suppliers?" (PW, Feb. 8, '60, p. 11).

I believe they should be given preference from a stock or inventory position. You do not have to carry large inventories. They can act as your warehouse and be drawn upon as required, providing of course material and prices are equivalent to competition. We take advantage of this situation in many instances.

Further, it also improves city-wide industrial relationship with your company to have local firms as reliable sources of supply.

Finally, they could be of assistance in any problems that may arise concerning your company.

H. Fischer, Jr.
Purchasing Agent
Russell Mfg. Co.

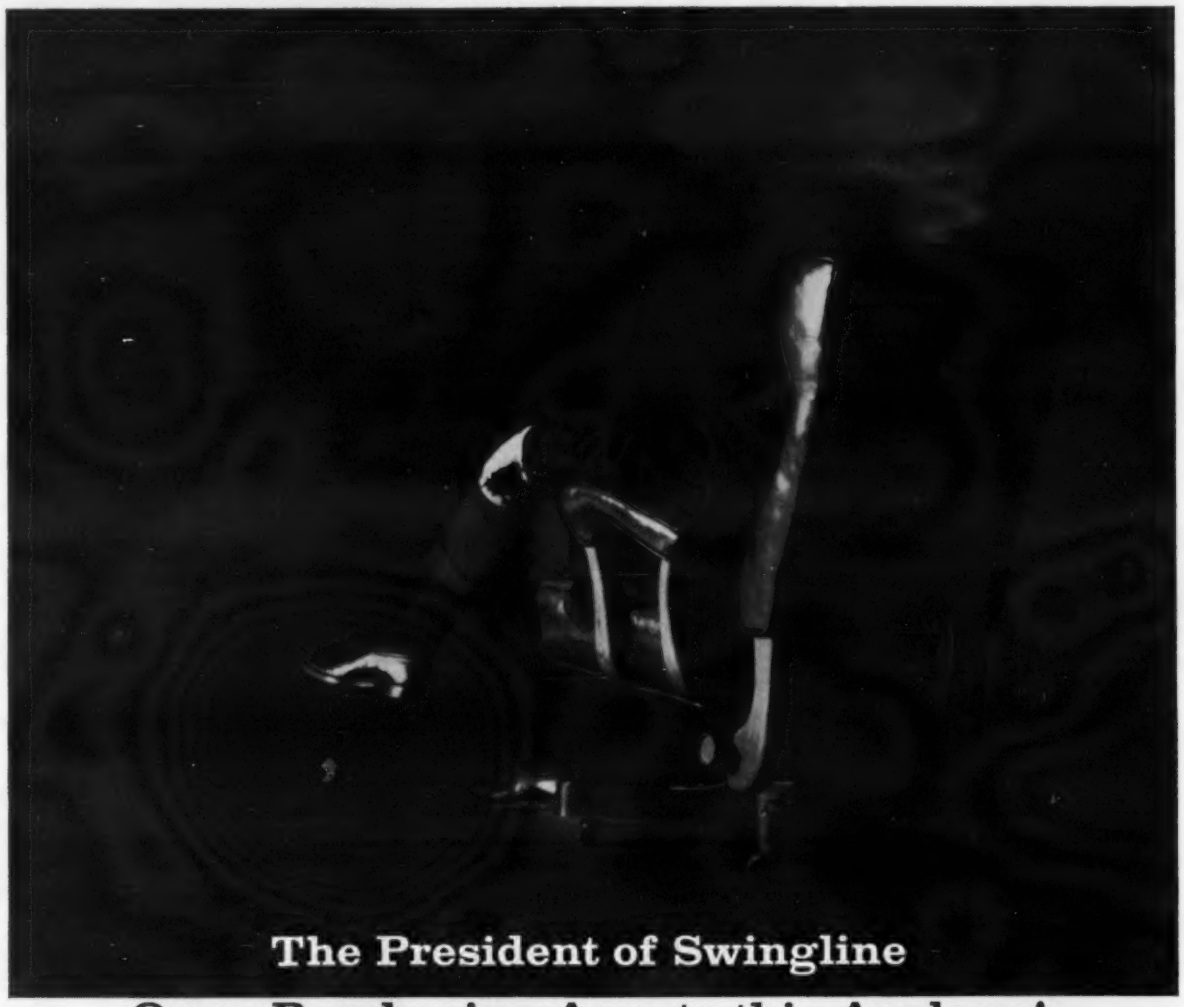
Buffalo, N. Y.

Hear! Hear! Bravo Mr. Austin (PW, "Letters & Comments," Feb. 1, '60, p. 15).

Gilbert & Sullivan once put it to music—"Jackdaws strut in peacocks' feathers."

Roy Hawkes
Purchasing Agent
Harper Electric Furnace Corp.

● In his letter to PW, E. C. Austin, vice president-procurement, Fluor Corp., Ltd., commented sadly on the tendency of purchasing "experts" to rush into print with "stale sermons" and urged his colleagues in the purchasing field to concentrate on their jobs and "stop telling management how good we are." Ed. Note



The President of Swingline

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Our face is red—and deservedly so! There *you* are, each day busier than the last, bothered with every office request from a rubber file finger for Fanny in the file department to new cabinets for the president's outer office—and here *we* are, the world's largest manufacturer of staplers for home and office use—and we've never really given you the opportunity to *try* all the wonderful equipment we have to offer so that your job could be so much easier! Frankly, we're ashamed. In fact, we feel even worse when we stop to realize that we make a stapler for your *every possible office need*—even that special one you've been hunting through catalogues for. For example, we have that marvel of marvels, the *completely automatic* electric stapler that requires only a feather touch to turn out tons of fastening work. If you want a master desk stapler, our No. 4 holds 210 staples—loads in a breeze thanks to our exclusive open channel. The No. 3 is a shorter desk model...the No. 27 a rugged model that can be imprinted with your company name, too. Want versatility in action? Our No. 77S does a 4-in-1 job: staples, tacks, pins, fastens and *stores* 500 staples. Purchasing for a small office? We've designed the No. 99 specifically for the smaller office—yet it holds 105 staples for ready action.

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Our number is Stillwell 4-8555. Just ask for the man with the red face!

P.S. Make up for our delay. Ask your stationery supplier about our offer—he will be glad to service you promptly.

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Nonferrous Metal Prices: Steady Through 1960

Increased Demand Should Balance Ample Output And Hold Basic Tags at 1959 Year-End Levels

New York—P.A.'s can look for generally stable prices—with few and narrow fluctuations—among nonferrous metals in 1960.

In 1959 nonferrous prices rose some 5½%, most of the increase coming after steelworkers resumed work. With a 7% over-all increase in consumption forecast for 1960, and the depressing effects of the steel strike behind them, nonferrous metals should keep close to their year-end price levels.

Summary of Prospects

A summary of 1960 prospects for the more important metals in this group follows:

Aluminum. Primary aluminum production—which registered a 24% gain in 1959—is expected to increase another 12% in 1960. All the white metal's major markets, except for residential construction, should improve. Automobile aluminum consumption will climb, and so will appliance and aircraft use. Commercial construction usage should set a new record.

The outlook is for stable prices at the level set last December. Foreign competition, industry market expansion programs, and ample production capacity, should prevent any noticeable price rise in the coming year for purchasing agents.

Copper. Red metal consumption rose 18% in 1959 over 1958. This year, the outlook is for a further consumption rise of 3½%.

Growth will come from inventory rebuilding, following in the wake of the many and long copper strikes; increased industrial and commercial construction which should more than compensate for decline in residential building); and greater demand from the electrical power industry.

Copper prices, which advanced late in 1959, are expected to be firm during the first half of 1960. But high production may bring about price cuts in the second half. It should be noted, however, that copper producers have shown a definite preference for trimming production rather than prices.

Zinc. 1960 zinc consumption—after an 11% gain in 1959—is slated for another 11½% jump, sparked by greater demand from the auto, appliances and machinery markets for larger amounts of the metal.

Zinc prices rose some 11% in 1959 over 1958 levels. Part of this strength came from U. S. import quota restrictions put into effect October, 1958 these restrictions were aimed at increasing domestic production to an "adequate mobilization base" level of 550,000 tons. Since the 1959 output of 412,000 tons fell far short of this goal, removal of import quotas next year appears to be unlikely.

If the quotas remain and 1960 demand accelerates as expected, zinc prices will remain firm—perhaps increase slightly—during what looks like the best year the industry has experienced since 1955.

Lead. 1960 should see lead consumption go up about 4½%—following an 11½% gain recorded in 1959—due to the expected pickup in automobile and truck production in the current production year.

Increased demand, coupled with comparatively low manufacturer inventories and strike-reduced producer stocks, should provide the climate for ½¢ to 1¢/lb. increases in lead prices as the year progresses.

Tin. 1960 prospects are only fair for tin production. The influx of imported tinplate in 1959 kept inventories up, and thus prevented a demand surge after the steel strike.

Tin prices are expected to fluctuate within narrow limits—between 99¢ and $1 per lb.—because of the International Tin Agreement, which calls for buying up surpluses and easing export quotas.

Manganese and chrome. While 1960 consumption prospects for both these imported metals indicate substantial improvement, their currently low price tags are expected to hold until present excessive stocks are depleted. Advances may occur in the latter part of 1960, if steel production—their big market—continues high.

However, increases in ocean freight rates—forecast by some observers—may boost the cost of these metals earlier than anticipated.

Magnesium, molybdenum, cobalt. Ample production capacity should keep these nonferrous tags stable, despite good 1960 demand prospects—especially for magnesium.

Mercury. 1960 prices should climb from present levels—$210 to $212 per 76 lb. flask. The government, absent from the 1959 market, will resume buying in 1960.

Mercury tags are at their low point now. McGraw-Hill's *Engineering and Mining Journal* estimates that mercury prices will average $225 to $230 per 76-lb. flask during the remainder of 1960.

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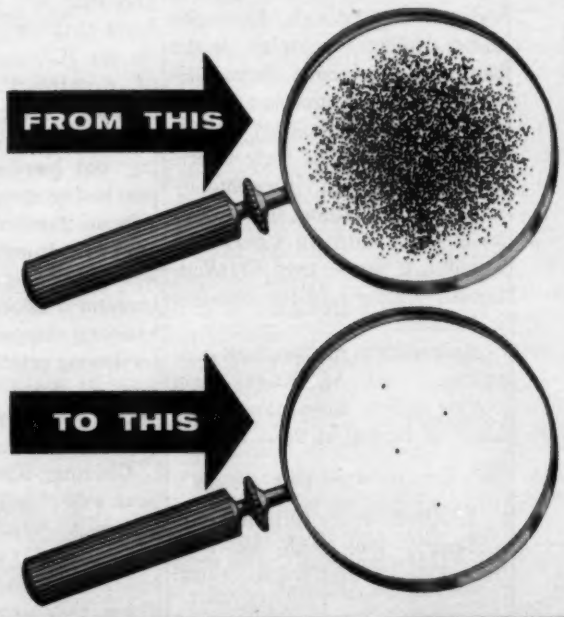

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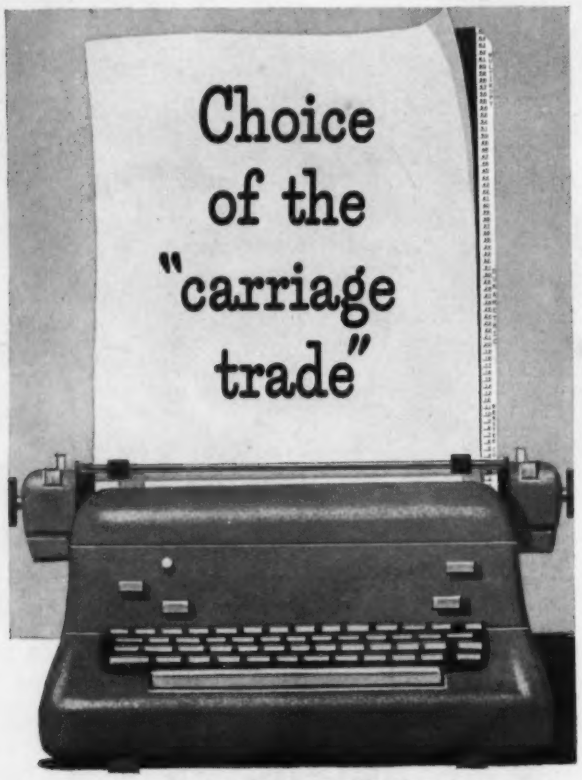
Congressman Introduces New Legislation to Boost Mining

Washington—Rep. Montoya (D., N.M.)—one of several dozen congressmen and senators to do so—has introduced new legislation to aid small domestic lead and zinc miners through federal subsidy. Until the Tariff Commission makes its much-anticipated report to Congress on its broad investigation of domestic lead-zinc industries around the end of March, none of the many lead-zinc relief bills will be scheduled for hearing.

The first action following the commission report will be taken in the powerful Senate Interior Committee headed by Sen. James Murray (D., Mont.) Murray plans to introduce either price supporting subsidy legislation for a long list of metals (including lead-zinc produced by small mines), or new tariff-quota legislation to further restrict imports, or both.

Most of the congressional bills—introduced as feelers and trial balloons—involve raising tariffs on lead-zinc imports, both on ores and concentrates on manufactured or semi-finished forms. Others like Montoya's involve straight price-support subsidies for small mines, still others involve production bonuses.



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Price Is Important, But It's No Substitute For Knowledge of All the Variables in Use of Forms

ASK any P.A. what his No. 1 Chaos Area is, and he's almost sure to nominate business forms.

Just to give you an idea: UARCO Inc. has catalogued some 50,000 different forms by industry, product, and system. And that's only a small part of the story. Designing, ordering, and storing this mountain of paper is such an expensive job that handling costs run about 20 times the price of the forms themselves.

To be sure, there are some "shelf items" (accounting, ledger, and tax forms, for example). Large business-form manufacturers and designers constantly keep trying to add more. Why not let us carry your inventory, they ask? Why not standardize more?

But as of today, the do-it-yourself and "special" forms still are tops in volume.

Given this situation, the P.A. may ease his fate by noting the following observations, tips, and rules culled by PURCHASING WEEK from a variety of sources in the business-form field:

Alven S. Ghertner, president of the Nashville printing firm of Cullom & Ghertner Co., charges that American firms sometimes spend about as much time on buying printed business forms worth, say, $25,000 as they do on the purchase of as much as a half-million dollars of production equipment.

"Buying a business form is more than just a matter of buying paper and printing," says C. Don Frankenberger, assistant sales services manager, UARCO, Inc., Chicago. **"It means buying an idea," he asserts with a great deal of conviction.**

Review Form Buying

Streamlining office procedures through automation and other devices is not enough, he maintains. Unless companies, at the same time, improve their business form procedures so as to get the maximum efficiency at the least cost, some of their efforts are going to waste. If a company hasn't done anything to improve its business forms in a period of about five years, says Frankenberger, a review of the situation is in order.

According to management consultant Frank M. Knox, form buying differs from most other kinds of buying in these two respects:

1. Almost every form is a custom-made job, with its own unique design and specifications.

2. Form buying usually involves a large number of separate small purchases, because most forms are used in quantities of a few hundred to a few thousand in any one year.

One point about business form buying that is often overlooked, according to UARCO's Frankenberger, is that the actual cost of a form—the paper and printing—is small compared to what the company has to spend on handling the form once it is purchased. The U. S. Government, for example, figures it spends about $20 on a $1 business form. The $20 going into the ordering, receiving, storing, filing and distribution.

For private industry, this figure would vary, but probably would be somewhere in the same neighborhood as the government figure, Frankenberger notes.

Consult Others

He recommends that the P.A., instead of trying to do the whole job himself, consult the people who will be using the form. He also suggests briefing the printer on how the form will be used—what kind of machines will be involved, the people who will work with them, and any other intangibles that may help the printer in his dealings with the P.A.

The job of buying forms can easily get out of hand—and when this happens the P.A. may find that he's turned into little more than an order form clerk. As one P.A. for a national chain of department stores reports, **"Until we established a carefully planned system of forms purchasing and handling, instead of a purchasing agent I was becoming a forms handler. I was spending anywhere from 12 to 18 hours a week designing forms, checking inventory, allotting office space, handling shipping details and interviewing printing salesmen. We now sit down with the printer once a year to plan all the forms for the year ahead."**

Ghertner, Knox, and others believe that P.A.'s can do a lot to streamline form buying by using more complete specifications and better design techniques. In addition, they stress the need for a broader knowledge of printing methods and printing costs.

Advantages Cited

Knox cites these advantages for the streamlined approach to forms buying:

1. Misunderstandings between the using department and purchasing or between the P.A. and the printer are reduced to a minimum.

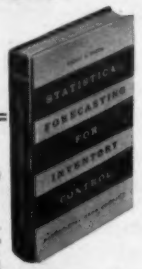
2. Printers know exactly what they are bidding on; thus bidding on printing tends to be more on the target.

3. The P.A. can demand a certain standard of performance in keeping with the copy and instructions. The printer will not be able to "alibi" a poorly executed job because specifications will have covered all the details.

To understand the economics of printing, the P.A. should familiarize himself with the two elements that determine price—preparatory cost and production cost.

"The P.A. will have little con-

How to FORECAST INVENTORY NEEDS



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By Better Business Form Buying

cern with the printer's breakdown by paper, fabrication and overhead," Knox points out, **"but he will need to know the breakdown by preparatory and production costs because they determine the difference between the first run and the reruns of the same printing job."**

Preparatory costs are the costs that must be incurred before the job can be run on the press: composition, proofs, electros, plates, etc.

Ask for 2 Bids

The alert P.A. Knox maintains, will ask for two bids—one on the first run, which includes all preparatory and nonrecurring costs; the other on the rerun, based on no changes in the copy for the form.

The second bid tells the P.A. exactly what production costs—paper, press time, and binding—add up to. In making two bids, the printer is required to separate the elements of cost, and this gives the P.A. some figures that are more useful to him for comparing competitive bids than single estimates of the printing would be.

Ghertner suggests four basic steps companies should take as a means of developing more efficient forms procurement:

1. Standardize as many of the company's forms as possible.

2. Limit forms procurement authority to a select group of persons.

3. Establish a scientific forms ordering schedule that best meets the basic requirements of your company.

Citing specific areas where the P.A. can make significant cost savings, Ghertner comes up with the following:

● **Paper**—The P.A. should purchase paper to a standard and not a price. The weight and grade of paper, for example, should be determined by the needs of the particular form—the length of life wanted and the use it will be put to.

"Here is an area where we have found it possible to make definite savings," says one P.A. for an insurance company. **"The paper quality questioned was for an automobile insurance application form. The form was being printed on #2 sulphite bond, a rather expensive grade of paper. The size of the form was 8½-in. x 14-in. Since this paper was available in only standard sheets, we had 8 in. of waste when the form was cut after printing. The printer suggested that if we gave him a longer lead time—70 days instead of the 30 we had originally specified—he could effect a two-way saving. First, he could substitute a titanium-filled paper for the #2 sulphite. Secondly, he ordered the paper in a special size from the mill—eliminating the 8 in. of waste. We granted the request for a longer purchase lead time. The result has been a saving to us of 25% over previous purchases of the same form."**

● **Size**—Business forms are printed on standard size press sheets—the larger the form the larger the press sheet. This is all right, Ghertner notes, unless the particular form happens to be one that could be printed in a smaller size.

One company was able to cut cost about 40% by using smaller size press sheets. **"This saving resulted both from the smaller-sized standard sheet, which was less expensive and by printing in a combined run with other forms,"** reports a company executive.

● **Combined runs**—Forms with similar characteristics, paper grade, ink color, etc., can be fitted together on one press sheet. Thus, each type of form shares in the cost of the printing: There is only one make ready (preparatory) charge and only one printing (press run) charge using the combined run.

Sometimes P.A.'s can time procurement to take advantage of combined runs, sometimes printer will do this on his own, Ghertner said. However, use of this method entails a great deal of standardization and inventory control. Usually it is most advantageous only in large quantity orders.

● **Shipment** — Avoid multi-shipment, if possible. Instead of having printer ship each job as completed, P.A. may work with him to develop shipping schedules, Ghertner noted. Excessive handling costs can be avoided by consulting with printer so that different types of forms will be shipped to same location at the same time.

● **Re-orders**—Set up systems. P.A.'s are often faced with a choice between small quantity buying at high unit prices risking little or no chance of obsolescence or buying in larger quantities with high risks from out of date forms.

Ghertner indicates that 10% to 15% of your annual printing dollar can be lost in obsolescence.

● **Low-value items**—Centralize the purchase of printed forms to cut the cost of processing low value items. Remember that buying forms involves many orders for low value items, each costing as much as $15 for handling and processing.

● **Internal printing** — Check cost of in-plant printing done on duplicating equipment. It may be cheaper to farm out jobs with press runs of more than 3,000 copies.

Contract Buying Pluses

Experts agree that contract purchasing is the best way to buy forms, but only if the P.A. maintains a tight degree of control on forms, prices, and delivery schedules. Contract printing presents these advantages over spot buying, according to Knox:

1. It eliminates a great deal of paperwork by the purchasing department.

2. It allows printer to charge lower prices because of guaranteed volume.

3. It makes for a more stable price structure.

4. It permits bulk warehousing.

Summing Up

Frankenberger stresses that the P.A. should look beyond the immediate savings he can make by cutting initial costs to the larger gains to be obtained by considering all the factors listed in this article. He puts it this way: **"You can't blame the purchasing agent for wanting to make a savings on his own, but if he is really a dedicated man, and his company recognizes it, he can help achieve much more substantial savings in the preparation, handling and distribution of business forms."**

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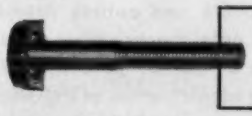

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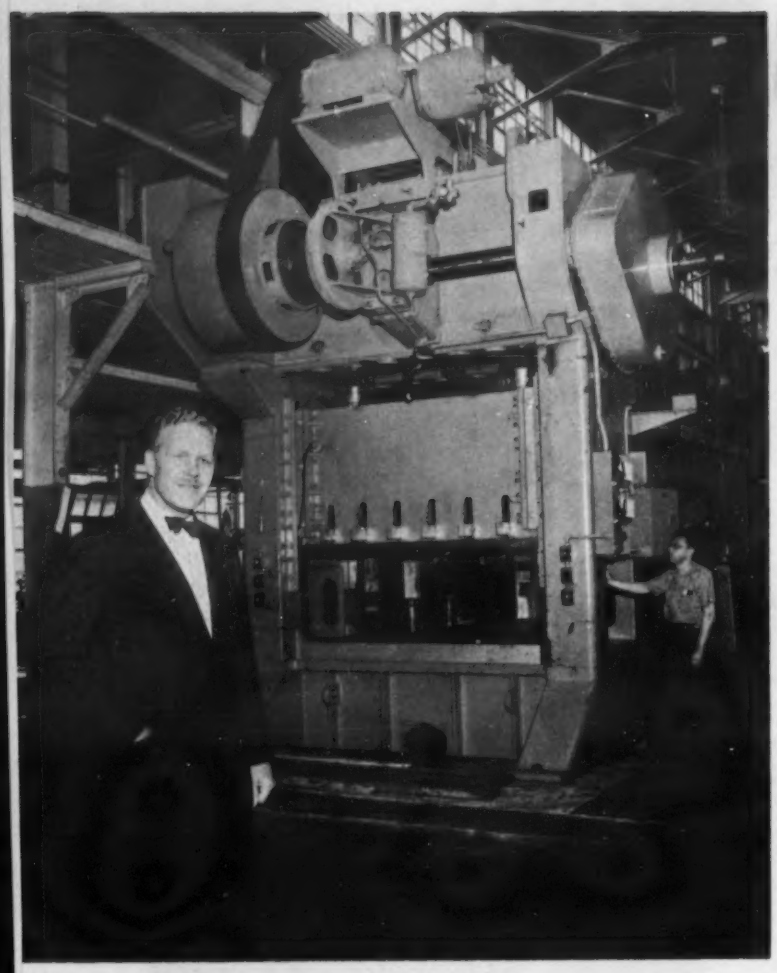
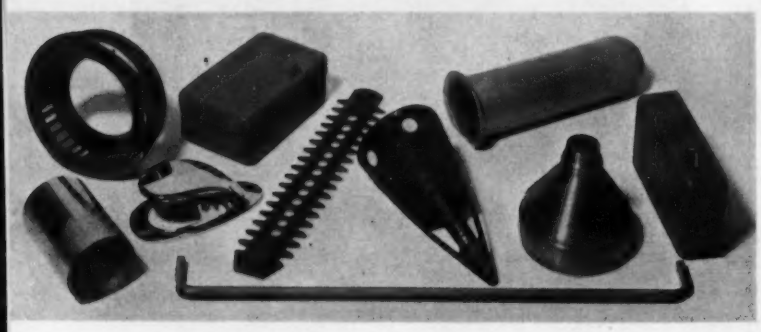
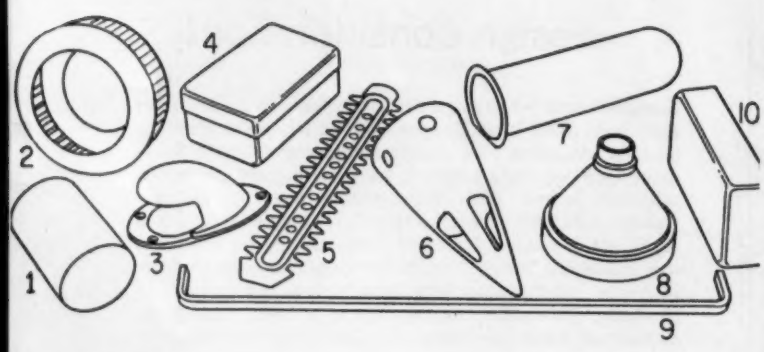


AUTHOR:

CARTER C. HIGGINS finds stampings a fascinating field after more than 20 years in the business. Born in Worcester, Mass., in 1914, he received his AB Degree from Yale, took graduate courses at King's College, Cambridge, England. Last year he served as president of the Pressed Metal Institute. He has written many articles, including "Make or Buy Re-Examined," "Practical Manual of Sheet Metal Design," and "Management Controls for Small Business." Higgins started work for Worcester Pressed Steel Co. in 1938 as a clerk.





SUBJECT:

METAL STAMPINGS, like these in photo and outline drawing. These 10 types of stampings give only the broadest idea of the many types, shapes, and sizes of stampings available to the purchasing manager. Here's the identification of the stampings shown in the photo: (1) can; (2) assembled blower; (3) boat light; (4) junction box; (5) flat frame for a hedge clipper; (6) thin chrome molybdenum rocket shell; (7) tube; (8) stainless steel milking machine cup; (9) long bracket; (10) cover.

When You Buy Metal

Here's What an Expert Says About Purchasing Stampings, and How You Can Sharpen Your Buys

Carter C. Higgins
President, Worcester Pressed Steel Co.

Stampings come in an enormous variety of sizes and shapes. They vary from tiny shoe eyelets to huge freight car ends. Thickness may be as little as 0.005 in. or as much as ⅝ in.

Stamping materials are worked cold in a press at speeds varying from 100 to 48,000 strokes an hour. They are punched out by a die and are dense, strong, and inexpensive. Surfaces come clean from the press in most cases, and hand work is rare. Usual tolerance range on a run of pieces is 0.002 to 0.030 in. (depending on the size and gage).

All stampings fall into one of five basic categories: **(1) flat**—laminations, gears and linkages, bases and cover plates or assembled layers of flat parts; **(2) formed**—brackets, folded radio chassis, fluorescent light reflectors, typewriter keys and frying pan handles; **(3) drawn**—pots and pans, auto fenders, oil filter cases, fountain pen caps and lipstick cases; **(4) coined**—nickels and dimes; and **(5) special**—made on specialized machinery—tin cans and zippers.

Processes have changed greatly since the first American press started cutting nails before 1800. We now have ways of producing stampings complete in one press operation with new high speeds, ways of saving die costs for shorter runs, stretch presses, and new ways of cold extruding steel. Despite new competition from plastics, die castings, shell molding, and powder metals, the use of stampings continues to grow.

The number of potential stamping sources runs into the thousands. No single company supplies as much as 1% of the market of independent stampers; stamping firms compete not only with each other but often with customers who can stamp for themselves. Many of the largest users both buy and make stamped components.

Good sources are scattered throughout the country. Although many smaller stampers sell locally only, others may sell difficult, unusual, or extremely precise work to customers more than 1,000 miles away.

No single stamper can make all shapes economically. Therefore, choosing the right source or sources for your parts is vital. Though some companies handle a wide variety of materials and parts, most tend to develop certain fields of work in which their knowledge and equipment give them a competitive advantage.

Certain quotes are out of line because communications fall down. Ignorance of job requirements, even with clear prints, is the greatest single cause of misunderstanding. Some place, there has been a slip between your engineers and you, to the salesman, to the sales department, to the estimator, and back again. Another reason for large variations lies in non-stamping costs—machinery, grinding, finishing, assembly.

If you need stampings by a certain date, you must give adequate lead time. Your supplier must buy material, design dies, and order die rings and components, construct the dies, and run a sample through for your approval. The first operation is commonly built after sample approval so that some weeks elapse between sample approval and first run production.

For example, a $2,500 set of steel dies may take 10 weeks to the sample stage and four or five weeks more for production. Add a week for every additional $1,500 of die charge. The die charge varies with conditions. Repeat order lead times (which are a combination of material lead time and the production cycle), run from two to 10 weeks or more.

Now that we have taken a look at the industry as a whole, let's see where we can save money in our stamping purchases:

10 Ways To Cut Costs of Metal Stampings

(1) Specify total amount.

Stampers construct different kinds of tooling for runs of 1,000, 10,000 or 100,000 quantities. Even if your first order is small to prove a model, let the stamper know if you anticipate larger quantities. Higher initial tool charges frequently mean lower piece prices. Also, a mill order for 10,000 pounds or more of material is far more economical than several smaller orders.

(2) Order in quantities.

Several factors make small runs more costly, including die set-up, order processing, and raw material quantity discounts. On runs below 500, set-up frequently costs as much as running. Set-up costs of $100 spread over 10,000 pieces would mean charges of one cent each; on 1,000 they would come to 10¢; and on 250, 40¢ each.

Tool repairs and risk are also higher on small orders. It is usually economical to combine small orders into quarterly orders at least. Some companies require there be 1½% savings on quantity for each extra month's storage. Thus a 10% saving would justify ordering up to 8 months' supply (1 regular month plus 7 extras @ 1½%).

(3) Issue blanket orders.

A stamping order for a year's requirements, with shipments made against monthly or bi-monthly releases, lets stampers plan material purchases and schedules and may lower price tags. A blanket order may show a maximum and minimum quantity, or it may guarantee a minimum quantity or a promise to take parts out in 15 months. The customer is liable for any changes ordered when the stamper has material or parts on hand he cannot divert.

(4) Get alternate sources.

Having alternate sources on large runs (where two sets of dies can be built) permits some competition between sources, as well as assuring delivery.

The stamper thinks of himself as sole supplier for a part once the die is placed. Stampers do not make a profit on dies, and have clauses to discourage removal. Another word of caution—dies fitted to one man's presses frequently require refitting and personnel require re-educating if dies are moved. This factor makes it rather dangerous to place orders for parts for which your supplier has only a single press available. It might become heavily scheduled or it might even be broken when you need it most.

(5) Supply your own material.

Because profit markups usually apply to material as well as labor, you may save a little by supplying materials to stampers. Unfortunately, you then assume responsibility for the quality of the material.

(6) Redesign parts.

Unnecessarily tight technical specifications add a lot to stamping costs. Some of the worst are:

Requiring that all burrs be re-

Stampings, You've Got 10 Chances to Cut Costs

moved or sharp corners broken on large, thin, or fussy finished parts (which cannot be put in a barrel and tumbled.

Specifying too close tolerances on: (a) wall thicknesses of drawn cups or boxes, (b) walls of flanges around small holes (and the length of such flanges), (c) radii, (d) angles, (e) flatness (steel sheet may be ordered flat within ¼ in. in eight ft. or $\frac{1}{32}$ in. per ft., but there is no assurance that any bend will be gradual, and no tolerance is given for flatness across the sheet), (f) roundness, and (g) print blanket (using tolerances set up for small pieces on large parts).

Failing to choose types of finishes that cover small handling scratches or the "dings" you get when stampings are dropped between operations.

Locating holes from the base dimension in formed up brackets or sikes. They may have to be pierced after forming rather than in the flat.

Designing deep drawn square or rectangular boxes with so little clearance around internal mechanisms that there is no margin for bowing or flare.

Failing to indicate that drawn cups, boxes, etc. may be pinch trimmed and either sanded or left sharp. This applies particularly to stock thickness of 0.040-0.093 in. Pinch trimming is drawing a part over a sharp edge and cutting natural irregularities off in a draw die; e.g., a ring of stock comes off a cup. Although the edge is left quite sharp, it is the cheapest way.

Specifying the hardness of raw material rather than emphasizing properties desired in the finished part.

Requiring holes closer than 1/32 in. to each other or to an edge (on heavier stock under two thicknesses). This means reaming or extra operations.

Using striking operation when radii under cup flanges are not important. Striking can be eliminated by making radii about three times stock thickness.

Carrying tolerances too deep into cups. Stampers usually like 0.001 in. per in. of height to get cups off the punches. Thus, a 5-in. deep cup with plus or minus 0.003 in. tolerance on the inside diameter is not too hard to obtain if the tolerance applies only to the mouth, but very difficult to get if it runs all the way down.

Requiring notches or holes to be punched in a certain direction such as radially, when it would be more economical to punch several from one angle.

Requiring drawings of sharp corners where they are not needed.

(7) Check packing specifications.

Except for the government, packing specifications seem to be omitted on most inquiries, although packing can be quite expensive on larger parts. Cartons cost 80¢ each and box prices go up to $6-8. Some parts are shipped separately bare, but this often increases handling costs, and in many cases is not acceptable to common carriers (particularly if parts have operation lubricants on them).

Other packaging methods include: boxes, crates, cartons (either plain or egg crated) and pallets.

(8) Buy parts complete to a logical shipping point.

If you have a good machine shop, you can very possibly do machining at least as well as a stamper, and might ask him to quote machining as an extra. He may well be sending the part out for a major part of the cost (and marking it up) when you can make or buy such operations cheaper and better. One recent quote breaks down as follows: 60% machined part, 10% stamping, 5% heat treat, 15% brazing and the rest plate and pack.

(9) Consult vendor.

Learn from suppliers and let them learn from you. They can help you redesign parts and keep up with latest technical developments. They can suggest ways of buying economically.

Vendors' ideas are sometimes not practical; they do not know your functional and assembly problems as you do. Yet they are specialists in their work, while your company specializes in your products. Therefore, your wise judgment is putting vendors with ideas in touch with the proper engineers in your company can be very fruitful.

(10 Cut costs on short runs.

Cold metals are very hard, so stampings require higher tooling costs than say castings. Perhaps you use such small annual quantities of parts that you cannot afford to pay for dies over their life. Here are five ways you can put to use to get around high die costs:

See if you can locate suitable dies already in existence. Though most sets of dies are held for the exclusive use of those who paid for them, many sizes of discs, washers, condenser cans, boiler heads, caps and boxes are available without die charges. Perhaps your design can be made with dies built for some now obsolete part.

Try a short run stamper. They specialize in runs of 50 to 5,000 or even 10,000 parts. They minimize costs by using ingenious thin blanking dies and simple standard elements for piercing and bending.

Consult sheet metal shop. They use shears, flame cutting, press brakes, rolls and standard punches to fabricate simpler shapes like tables, channels, corrugations, folded boxes and frames to your taste—with little or no tool charge.

Consider a hydroforming serv-

(For more on stampings, turn the page.)

What 11 Kinds of Metal Stamping Shops Can Do for You

TYPE OF FACILITY	EQUIPMENT AND SKILLS	TYPE OF PRODUCT	LIMITATIONS
General Producer	Variety of presses 20-200 ton.	Mostly steel parts, cups, covers, bases, brackets, boxes, and cones.	May avoid unusual materials and tolerances under ±.044.
Progressive Shop	15 to 75 ton presses with roll feeds and progressive dies.	Cups up to 2 in. deep, escutcheons, electronic parts.	Want runs of 30,000 up, material gages below .063 in.
Specialist	Special equipment, skills and material.	Washers, springs, perforated metal, bent or pierced tubes, boiler heads.	
Deep Draw & Large Part Shop	Large bed and/or long stroke presses and anneal furnaces.	One-piece parts 10-20 in. deep. Boxes, shells, finders, auto tops, large frames, heavy blanks.	Small, one operation work requires different skills.
Unusual Metal Shop	More special skills than equipment.	Parts of magnesium, inconel, bronzes, titanium, Kovar, etc.	Higher engineering and metallurgical overheads.
Precision Shop	General knowledge increasing. Requires well-maintained equipment and gages.	Parts of close flatness or tolerances ±0.005 in. down to ±0.0005 in.	Extra costs of quality control and tolerances.
Stampers Plus	Experience and equipment to machine, assemble, weld, heat treat, polish, grind, plate, anodize, broach, roll thread.	Most stampers spot weld, tap, and machine trim, but many parts may call for more operations.	Depends on equipment.
Roll Formers	Presses and roll form equipment and rolls.	Long parts like channels, moldings, tube shapes, frame members, wrapped around rings.	Often want large quantities of material.
Eyelet and Transfer Shop	Special presses with several stations for work. There are few transfer presses independent of stamping shops.	Parts like eyelets, grommets, lights bulb bases, ferrules, blasting caps, lipstick cases, caps with tabs—some overlap with progressive dies.	Tools expensive. Usual runs 100,000. Smaller parts 2½ in. deep or redrawn to 7 in.
Impact Extruders	Fast, heavy presses and feeds, cutoff equipment. Steel requires heavy presses.	Symmetrical shells (plain or ribbed) up to 8 times diameter in depth—toothpaste tubes, condenser cans.	Walls over 0.030 in. thick. Maximum diameter 3-4 in.
Multislide Shop	Multislides hit material from several directions in one operation.	Hose clamps, coat hooks and hangers, wrapped around brackets.	Metal width less than 2 in. and guage not over 0.062.

Story Begins on Page 16

How Metal Stamping Industry Practices Stand

Here Are the Ground Rules Agreed on by NAPA, Pressed Metal Institute for Buying, Selling

By H. A. Daschner, Managing Director
Pressed Metal Institute

The following stamping industry trade practices were first adopted in May of 1951. They were developed during meetings held jointly between the Pressed Metal Institute and the National Association of Purchasing Agents.

Dies—Payments by buyer of initial charges for dies, tools, jigs, fixtures, patterns and gages supplied by stamper doesn't give buyer ownership nor the rights of removal.

Ownership, including the right of removal, may be obtained by the buyer by negotiation and agreement in return for a fair reimbursement for the cost of the dies, design, development, experimental work, maintenance and storage.

Special dies paid for by the buyer will be used only for his requirements excepting by permission. Stamper agrees to keep dies in normal and reasonable state of good condition as long as they remain in his plant. He accepts no responsibility for the operation of these dies when used in any other plant or after they have been once removed.

Buyer will be charged for cost of adaptation, modification or excessive maintenance of tooling he furnishes.

Dies inactive for three years may be scrapped after notifying buyer and not getting any instructions to the contrary within 30 days.

Any resulting scrap value of dies shall belong to stamper as payment in full for storage and maintenance costs.

Insurance and Taxes—Any taxes imposed by federal, state, or local authorities on the manufacture or sale of articles covered by buyer's order, shall be charged to buyer.

Stamper will not insure buyer's material, dies, or tooling unless specifically requested by buyer and made a part of the order at buyer's expense.

If no special agreement is made, stamper assumes no responsibility for destruction or partial loss due to fire, or other casualty beyond stamper's specific and reasonable control.

Buyer's Material—Orders requiring use of buyer's material are accepted subject to delivery of material in dimensions as specified by seller, F.O.B. stamping plant.

If material is defective or will not perform to seller's requirements because of chemical composition, physical properties or dimensions, seller may cancel order without incurring liability, but buyer shall pay seller's costs through time of cancellation.

Scrap resulting from stamping operations shall be property of seller unless otherwise agreed in advance.

Terms and Discounts—Terms and discounts vary widely, but some suggested and recommended terms are as follows: F.O.B. seller's factory. Payment of die and tool charge invoice net upon submission of satisfactory sample; on parts ordered, 30 days net from date of invoice.

Seller reserves the privilege of declining to make deliveries except for cash whenever, for any reason, doubt as to the buyer's responsibility develops.

Quantities—All quotations are based on buyer accepting over-run or under-run on each individual item not exceeding 10% of quantities ordered.

Where closer control of quantity is required, special arrangements must be made.

Quality Control—Inspection by the stamper will be made on a percentage basis only in accordance with his standard practice of quality control. If 100% inspection is required, it shall be so stated on buyer's accepted order.

Parts proven unacceptable by buyer's inspection may be returned upon seller's written authorization with a claim for repair, credit or replacement as covered by "Claims" and "Quantities".

Claims—Buyer must submit all claims within 30 days of receipt of shipment. If such claim is sustained to the satisfaction of both parties, the seller shall repair, replace, credit or complete the order within the limitations of "Quantities".

Under no circumstances will the stamper be liable for damages or any claims for expense involved in using his product.

Seller will not allow claims for defective goods on those parts further processed by the buyer and resulting in changes which would make reworking impractical.

Claims for shortage must give the weights of each shipment, including tare, and advise the seller on the method used in arriving at a count of the parts. Freight and credit for returned goods will not be allowed by the seller without previous authorization.

Cancellations—Orders may be canceled or deliveries deferred only when the buyer assumes immediate liability and pays charges involved, which take into account expense already incurred, commitments made by seller, profit on work in process, and contract value of parts completed and ready for shipment.

Quotations—Stenographical and clerical errors subject to correction. Until an order is accepted by seller, quoted prices are subject to change without notice.

All quotation, unless otherwise stated, are for immediate acceptance. All orders and contracts subject to acceptance of seller's home office.

To this, many companies add the following:

"Prices quoted are on the basis of single release, single shipment of the quantity indicated unless otherwise specified."

Or: "In between quantities take the price of the next smaller quantity. Invoice prices are based on quantity shipped."

Tolerances—Unless specific requirements are specified by customer on blue-print or in writing, commercial tolerances customarily used in the stamping industry shall apply.

Commercial manufacturing practices and tolerances are those resulting from standard stamping procedures without extra operations or tooling.

Stamper will work to a tolerance of plus or minus 0.005 unless otherwise specified. If tolerances are not shown on drawings, he will assume the following: Fractional dimensions up to 3 in. plus or minus $\frac{1}{64}$; over 3 in. plus or minus $\frac{1}{32}$. Decimal dimensions are plus or minus 0.005.

Burring is a costly operation, and burrs will be kept to a minimum consistent with efficient operation. No extra operations are included for their removal unless specified by seller.

Transportation—Seller will use own discretion in choice of carrier in absence of shipping instructions. Seller assumes no responsibility for insuring shipments unless specifically requested by buyer and then at his expense and valuation.

Deliveries—Every effort will be made to fill orders within the time promised. The seller does not assume responsibility for any damages growing out of (or owing to) any delays in delivery.

Unless specifically stated to the contrary, orders will be delivered by partial shipment, packed in bulk, as fast as they are manufactured.

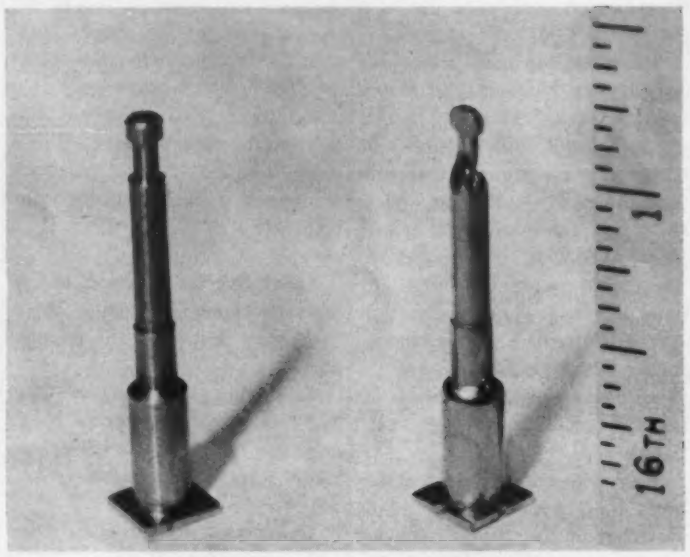
Finish — Unless otherwise stated, the finish is the normal surface of the steel or other metal used in producing the goods. When a special finish is required by a tumbling or degreasing operation, special charges will be made. Though most stampings are shipped with process lubricant left on, special rust-preventing oil is not figured unless called for.

Gages—If gages are required, they must be furnished by the customer. If they are to be made by the stamper, costs will be charged to the customer.

Samples—If a run of preproduction samples is required beyond the usual two or three, an additional set up charge will be made. Changes made in parts after samples are approved are at buyers' expense. When quoting on or asked to work to sample only, stamper is not responsible for details unless they are given in writing.

Patents—Parts are made by the seller strictly to specifications furnished by the buyer or commercial standards of the stamping industry.

It is agreed that the buyer will defend and save harmless the seller from any and all expense involved in any claims for damages from infringements of Letters Patent by the use or sale of parts made by the seller, either as such, or as parts or units of complete entities. Buyer does not assume responsibility for parts made on equipment violating licenses.



A Short Case History

The screw machines pin terminal (left) was redesigned to be stamped in progressive dies, (right) saving $114,000 a year, or some 47%. Made of 0.035-in. copper, with tolerances of 0.003-in. The parts took almost a year to develop, were designed by Malco Tool & Mfg. Co., Chicago.

(*Continued from page* 17)

ice. This is the trade name for a special press for drawing and forming. A punch is built of comparatively soft material and the material is pushed against it by rubber in the ram, backed up by hydraulic pressure. Parts up to 2 ft. dia. may be formed, with low tool charges. Fairly complex parts can be fabricated if they are not too deep. The high cost of the equipment and its comparatively slow speed limit it.

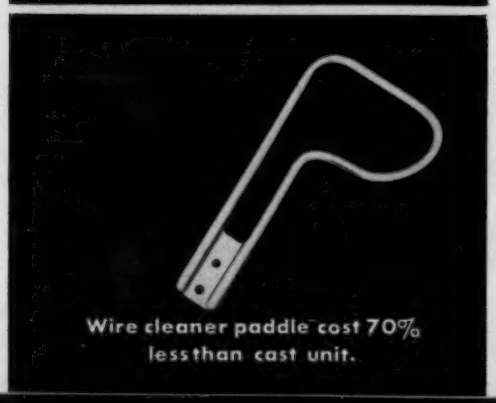
Try spinning. Spinners force metal over a mandrel usually of comparatively soft material, while the part is turning in a lathe. They have been adding power to their tools for some years, increasing their range of operation. Metal thicknesses can be varied; parts may be easily polished.

Titchener works wonders with WIRE...

Fan mount and protective cage designed and produced for Buffalo Forge Co., Buffalo, New York.

Wire tool holster cost $2.34 less than tubular unit.

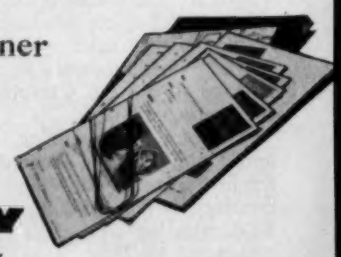
Wire motor mount-guard cut vibration, saved over $7 each.



Wire cleaner paddle cost 70% less than cast unit.

Imaginative design with wire and wire/strip components improves the quality, efficiency and appearance of finished products—*with substantial economies.*

Consult Titchener on your design and redesign problems. Take advantage of our complete production facilities for fabrication of wire forms, welded wire and strip assemblies, light stampings and staples. Send now for the Titchener Wire/Strip Value Analysis Design Package.



E.H. TITCHENER & COMPANY

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'You, Too, Are Top Managers,' P.A.'s Hear

A PROGRAM for saving $23,400 annually is explained by Lou Davis, far right, of Los Angeles Times-Mirror to other newspaper purchasers.

NEW OFFICERS of newspaper P.A. group are (seated), Larry Nash, Owen Lewis, Daniel Lewis; standing, Warren Swartz and George Quinn.

Cincinnati — Newspaper purchasing executives were applauded by top management recently as authorities on market conditions, price trends, and the general economic picture.

Addressing the annual National Association of Newspaper Purchasing Executives Convention Jan. 28, Charles W. Staab, business manager and executive vice president of the Cincinnati Enquirer, said:

"My purpose here is to persuade you that you are top management people in the newspaper business."

Belong at the Top

The publishing executive told the association members that they belong at the top operating councils, "in the act all the way on financial and equipment budgeting," and that they should be kept informed of the profit picture at all times.

He urged purchasing agents to continue seeking new techniques, to set goals, and be ready to take on new responsibilities to continually "prove your capabilities."

One of the highlights of the meeting was a session on "Good Buys I Have Made."

Dull Field—Bright Savings

Lou Davis, purchasing director for the Los Angeles Times-Mirror, reported savings of $23,400 in one year in the "dull" field of maintenance, repair, and operating supplies. He said the savings resulted from buying replacement parts direct from their original manufacturers rather than from the equipment producer, and by having others made to specifications at local shops.

Among the examples he cited was a lift truck pressure switch that cost $141.85 when purchased from the truckmaker but only $40 from the original parts producer.

On small parts made locally, Davis said he was able to cut prices for an adjustment screw from $7.95 to $2.00, and for a variety of shear pins from $2.00 to 43¢, from $1.50 to 28¢, and from $1.55 to 29¢.

At the meeting, the purchasing executives elected Owen Lewis of the Piedmont Publishing Co., Winston-Salem, N. C., as their new president.

Daniel Lewis, Christian Science Monitor, was elected first vice president; Larry Nash, Cincinnati Enquirer, second vice president; and Warren L. Swartz, Lancaster, Pennsylvania Newspapers Inc., secretary-treasurer.

Thor Opens New Office For Both Sales, Service

Aurora, Illinois—Thor Power Tool Co., manufacturers of portable air and electronic tools, has opened a new sales and service branch headquarters at 4200 Brookpark Rd. in Cleveland to serve northern Ohio.

The new branch office, larger and more centrally located than the firm's former Cleveland headquarters, is part of a nationwide modernization program being conducted by Thor.

THE CURRENT clamor over price fixing was quite evident at the Public Utility Buyers meeting, Atlanta—both from the podium and the floor.

THREE SPEAKERS taking a breather are G. H. Cole, Alabama Power; J. C. Reeves, head of Georgia P.A. Assn.; and M. B. Covell, Union Electric.

P. A. Attendance Sets Record At Atlanta Meeting

Atlanta—Widespread interest and concern over the general pricing turmoil in the electrical equipment industry spurred a record turnout at the annual Public Utility Buyers Group meeting this month.

An estimated 917 persons—which included more than the usual number of vendors—attended the two-day conference. The past attendance record was 753.

For the first time, the buyers group appointed an "advisory committee" composed of veteran utility P.A.'s which will work closely with the body's executive committee on important matters. The committee includes:

William H. Jones, Philadelphia Electric; Robert F. Isenhart, Dayton Power & Light; J. D. Hogg, Cleveland Electric Illuminating; C. F. Ogden, Detroit Edison; Mark B. Covell, Union Electric, and L. G. Wiseley, Michigan Consolidated Gas Co.

NAPA Convention To Feature Early Workshop Session

Los Angeles—Purchasing executives who go West in May for the 45th annual NAPA convention will find an added attraction on this year's program.

The "something new" at the conference, which opens at the Biltmore Hotel May 22 and runs through May 25, will be breakfast workshop meetings—informal "shop-talk" sessions on a variety of important subjects.

Some of the topics to be discussed at these early hour get togethers include "Workshop for the New Purchasing Agent and New Buyer," "Inventory Control for Small Companies," "Evaluating Purchasing Performance," "Lease vs Purchasing of Equipment," "Selecting Purchasing Personnel," and "Quality Control."

An important aspect of the convention, the Inform-A-Show, opens at 2:00 p.m. Sunday. The general convention sessions get underway Monday morning at the nearby Philharmonic Auditorium with the opening address of NAPA President Thomas O. English.

Two of the main speakers at the morning session include Rudolph F. Bannow, NAM president, and George Romney, president of American Motors Corp.

The afternoon will be taken up by national commodity committee meetings on steel, paper, textiles, nonferrous metals, fuel oil and containers. The Hendricks Club annual dinner is tentatively scheduled for Monday evening.

Following breakfast sessions on Tuesday, Dr. Robert D. Gray, director of the Industrial Relations Section of the California Institute of Technology, will address the general convention session on "Techniques of Management." He will be followed by William T. Reynolds, director of purchases and stores, Metropolitan Transit Authority of Los Angeles, who will talk on "Purchasing Intangibles."

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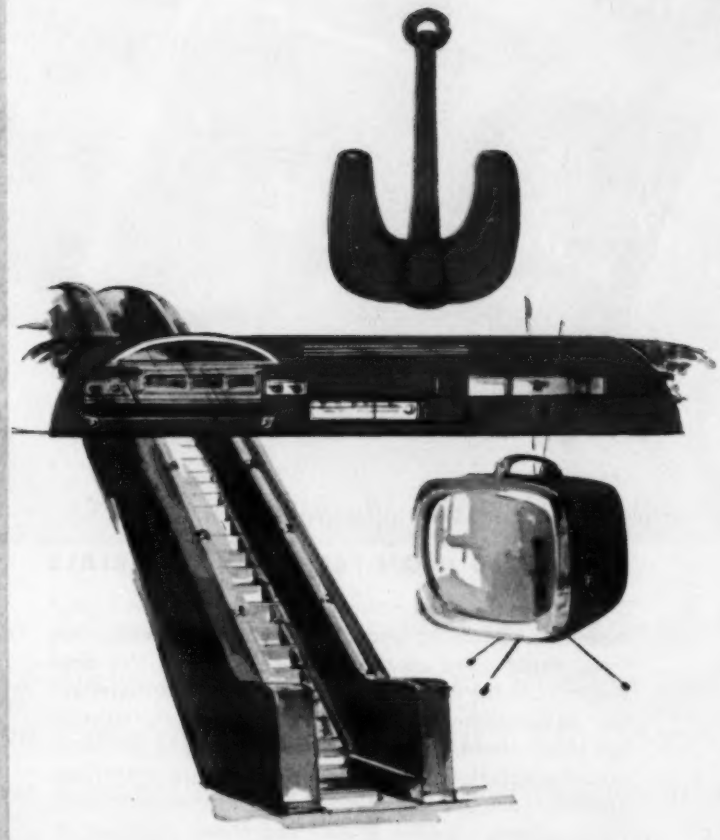

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Knox Glass Will Build 185,000 Sq. Ft. Plant

Atlanta—A leading glass container manufacturer will build a multimillion dollar plant here in order "to locate in the center of the maximum profit area of the Southeast."

Knox Glass, Inc., Knox, Pa., made the decision after surveying its present market in a Southeast area comprising Georgia, North Carolina, South Carolina, Florida, the eastern half of Tennesee, and the eastern half of Alabama.

The Atlanta location for the new 185,000 sq ft plant, said Walter Furlow, director of marketing and advertising, shaped up as the best for economy of distribution to this area.

The plant will manufacture containers for food, carbonated beverages, beer, liquor, dairy, household chemicals, and pharmaceuticals. It will also produce both Georgia and emerald green glass.

"In these times," Furlow told PURCHASING WEEK last week, "it appears that industry sources of supply must be close to a major market. Other companies in the industry seem to be moving —or have moved—in this direction, too. Right now, we pay substantial freight charges to the destination, a production cost which this move will reduce.

"We anticipate, however, no change in prices as a result of this move," he added.

Furlow noted that, while other Southeast locations offered certain advantages, the 30-acre Atlanta site promised the most dependable service to local customers, with a maximum profit return.

He added that Knox's nearest plants to the Southeast market currently are in Jackson, Miss., and Palestine, Tex. About 80% of production for this area comes from Jackson, about 10% from Palestine, and the rest from Knox's various other Northern plants.

The new plant is expected to go on stream late this year it was reported.

An Answer to Tire Discounters

Akron, Ohio—The lowest-priced nylon passenger tire ever offered by a major manufacturer will be introduced this month by the Goodyear Tire & Rubber Co.

Aimed at meeting the competition of department stores and discount houses, Goodyear will offer both the 6.00-16 and 6.70-15 tube-type black sidewall tires at $13.95 with a retreadable trade-in, and $16.80 without one.

In building third-line nylons for the first time, the manufacturer is coming out with five of the more popular sizes in the replacement field. The others are 7.10-15, 7.60-15, and 7.50-14. The latter has been the standard size for Fords, Chevrolets, and Plymouths for several years.

Price cutting of private brand tires by promotion-minded department stores and discount houses, according to the company, has been an increasingly bigger headache for national brand producers in certain areas.

Goodyear's lowest priced nylon tire previously was a second-line tire selling for $17.95 with a trade-in.

News of Suppliers

Napa, Calif.—The Clute Corp. is kicking off a $1 million expansion program with the construction of a 1,000-ton/day asbestos mill at the open pit mine site of Asbestos Bonding Corp., its wholly owned subsidiary here.

The first of four units, with 250-ton/day capacity each, is expected to be completed and ready for production runs within 4 to 5 months.

"For the past year," explained John H. Lowell, president of the company, "we have open pit mined and milled at the rate of approximately 60 to 70 tons of asbestos ore a day in our pilot mill." He said the company now is ready to move into stepped-up commercial production.

Los Angeles—Aeroquip Corp.'s Marman Div. is moving into a new development engineering center built here to take care of increasing work for the aircraft and missile fields.

The new 11,000 sq ft addition, says Don T. McKone, Aeroquip's vice president and general manager, is part of the firm's $2.4 million expansion program. It includes facilities for engineering, design, research, and development.

Marman produces clamps, joints, bands, straps, bellows, and duct assemblies for jet aircraft and missile systems.

Cleveland—American Supply & Machinery Manufacturers' Association, in conjunction with the NAM, has produced a TV film showing the role played by the industrial distributor in industry.

The film, called "Supermarket for Industry," will be shown by TV stations throughout the country as an episode in NAM's TV series, "Industry on Parade."

Houston, Texas — Stauffer Chemical Co.'s Nyotex Div. is doubling its production of aluminum fluoride.

Increased demand for the chemical by the aluminum industry, the company said, necessitated the expansion, which will be completed next month.

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What's an Associascope? It's A New Device to Test Packages

St. Regis Paper Co. Cooks Up a Scheme to Help Purchasers Make Certain They Get Money's Worth

Detroit—Open your unabridged dictionary and get set for some "foolproof answers" to your packaging problems. Listed in alphabetical order, they are:

Anglemeter, Associascope, Polarscope, Videoscope, and Visio Selectrograph. If you can't find definitions for these "scientific" problem-solvers, call Alf Nelson.

Long ago, Nelson, who is art director at St. Regis Paper Co.'s Crowell Carton Div., felt that a scientifically designed package would sell more goods than one chosen on the basis of aesthetics or management whim.

That's when he decided to develop his six machines that are now housed in his company's Department of Visiometrics, where customers, such as Dow Chemical Co. and Happy Pet Products, Inc., are testing their product packages for such things as visual impact, visual flow, attention value, brand recognition, legibility, and depth penetration.

According to Nelson, P.A.'s looking for a better package, with all the above characteristics, have only to drop their carton in a Polarscope, which looks like a giant TV set. The inside of the machine is illuminated by a constant, meter-controlled light source.

The tester controls a revolving, polarized viewing glass. The degree of light transmission is measured by recording the amount of rotation at the exact instant when the characteristics being tested become legible to the viewer.

No Dog's Life for Cats

The American pet is happier for all this, Nelson told PURCHASING WEEK, because the Happy Pet people dropped a package of "Tidy Cat" into the Polarscope.

While Happy Pet has been marketing "Tidy Cat" for many years, the company was dissatisfied with its package design. Crowell came up with a new carton, which doubled as a sanitary tray when opened. Happy Pet officials wanted customers to be most impressed with the words "Tidy Cat," "New," and "Tray," in that order.

Nelson's artists designed three packages, all of which looked the same until the Polarscope sorted the one which best fitted.

One of the Polarscope's first customers was Dow Chemical Co.'s Saran Wrap Div., which wanted to market its product in a "femininized" carton for supermarket shelves. Dow's own art department hit upon a lacy design with light green lettering on a dark green and white background.

The Polarscope, however, proved to Dow executives that human eyes, feminine or otherwise, could not recognize the new package as Saran Wrap unless it was picked up and examined closely, which is often difficult to do in a supermarket. The lacy idea was dropped.

A PURCHASING WEEK reporter, heard these definitions for Nelson's other machines:

- Angle-meter. "Measures self-service domination."
- Associascope. "Rates appropriateness of design to the product."
- Videograph. "Performs the function of the polarscope, except that the lighting imitates a television screen."
- Visio-Selectrograph. "Rates attention value and other factors in the actual sales environment.

POLARSCOPE FINDINGS on "Tidy Cat" package designs are discussed by Alf Nelson, center, with three officials of Happy Pet Products, Inc.

Keystone Mfg. Co. Pushes Plan for Faster Service

Warren, Mich.—Keystone Mfg. Co. has expanded its Special Products Div. to make possible a complete design, engineering, and fabrication service for all types of custom wiring enclosures.

In increasing its machine tool facilities, Keystone added special tooling items such as dies for producing all sizes of single and multiple concentric knockouts.

The expansion move, says Keystone, permits fast quotations and deliveries on any type of wiring application problem.

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Here's How

Traditionally, the men (photos, left and below) should be bitter rivals. These two aren't. For the fact is that the long industrial tradition of squabbling between purchasing and maintenance managers is now a thing of

Purchasing Agent

(P.A.) Walter F. West is in charge of buying all maintenance equipment and supplies at Merck, Sharp and Dohme's Philadelphia plant.

Plant Engineer

(P.E.) Philip G. Damm depends on P.A. West to keep him informed on new products and developments. Maintenance employment: 150.

This new anchor-bolt driver promises to save labor time by ramming a tube threaded on its inside diameter into concrete or brick walls. Tube drills its own hole.

P.E. "We'd be interested in using something like it, but I would want to know what happens when the drill bit hits reinforcing wire, how strong the mount is, thickness of wall you could use it with."

P.A. "I would find out what it costs, of course, and what competing products there are—and especially what the anchor bolts themselves cost. I'd get the information from the manufacturer and pass it on to you."

Heating or cooling tubing that wraps around a process or storage tank will keep contents at constant temperature, assure product quality.

P.E. "This might be good for lining the walls of one of our incubators to get constant wall to ceiling temperature. I'd want to ask the manufacturer what kind of service it could be used for—heating or cooling—and the types of heat or refrigerant fluids to use."

P.A. "I'd be interested in the material of construction, areas of coverage, and whether our standard connections would fit. Several other manufacturers make something that could be used in the same way. I'd suggest them to you. The problem is so specialized that we would stick to whatever you recommend."

Purchasing Week Goes to the Maintenance Show

A Purchasing-Maintenance Buying Team Works

the past in smarter companies. That was apparent in the way these two toured the Maintenance Show. Indeed, their teamwork for Merck, Sharp and Dohme (in Philadelphia) was the subject of a standing-room-only symposium at the show conference. The payoff, of course, is better cost improvement, less equipment failure, and less downtime in their plant. How does the new team work? See photos, below.

Small hydraulic press has fittings so that it can press shafts from gears, wheels, pulleys (or press keys into keyways).

P.E. "This is something we could use for a lot of pressure bending and pulling. I'd be interested in its capacities and the accessories available for other uses."

P.A. "This is a standard, readily available item, so I'd go to the catalog to get information for you, particularly about the accessories. No doubt you would want specific information."

New water-resistant insulation that won't deteriorate like many old line insulations from condensation.

P.E. "We have real problems with moisture on our piping. The magnesia type has ben damaged by water collection. We might be able to use this new product. We would want to know specifications about thermal conductivity, whether it is good for outdoor service, how it holds up under abrasion."

P.A. "I would want to see if this were really different from magnesia insulation, which hasn't been working for us. If it costs more, I'd want to know why. Also, for insulation, you sometimes have local installers, and I'd want to find out if they could do a good job for us, and what it would cost."

Valve display demonstrates operation by means of automatic timing that regulates fluid flow through lines.

P.E. "The things we are concerned about with valves is the material, service, diameter of the diaphragm. If it's a gate valve, the gate size and stem length. We know how our valves hold up, from maintenance records."

P.A. "Valves are something we try to standardize on. Experience with a particular manufacturer is very important and we'd want to be sure before we changed. Probably we'd call around or test them to see how they work.

This Week's

Foreign Perspective

FEBRUARY 15-21

Geneva—The international lead and zinc conference here has left most nonferrous metal buyers anticipating firmer world lead prices this year.

Producers at the meeting voluntarily agreed to cut production at least 50% until the current 100,000-ton world surplus of the metal is eliminated. Lead users had expected excess stocks to soften prices.

Lead, however, has continually lost ground to substitute materials, most producers admitted, and, while artificial price supports may help for a while, sustained industrial demand still remains the key to stable lead prices.

Zinc producers, on the other hand, are facing the rosy prospect of a 75,000-ton world deficit, which will mean firm to higher prices. This trend could be held in check, however, by tendencies to sell off current government stockpiles of the metal.

Great Britain has already announced a plan for gradual disposal of a 54,000-ton stock, which could have an appreciable influence on world prices.

• • •

London—British steel and cable prices continue to go their separate ways. Domestic steel prices, already "substantially lower than those ruling in the U. S.," were slashed on an average of 2½% to 3% last week, for the second time in less than a year. The government Iron and Steel Board said increased efficiency of operations was the reason for the cuts.

Meanwhile the U. K. cable industry, beset by a series of mergers that has changed the face of the industry, was hit by still another price hike decision by British Insulated Callender's Cables, Ltd., which announced "changes in discounts on trade prices."

What this adds up to is a 5% price boost on general wiring cable. Other cable makers are expected to follow suit shortly, just as they did last November, when Callender's hiked its low-voltage cables.

• • •

Mexico City—A leading radio and TV maker, Radio Impulsora Mexicana, S. A., is preparing its own threat to the American electronics industry with an $18, seven-transistor radio and a "super-cheap" television set.

Company officials said they'll start production on the radio next September and begin shipments to the U. S. shortly thereafter. Depending on the success of this initial venture, they'll follow up with the bargain TV deal, details of which they declined to reveal at this time.

• • •

Paris—European appliance makers, following the successful path of foreign car producers, are preparing to introduce "compact refrigerators" in the U. S. market.

Because General Electric Co. stopped producing small refrigerators in America, its French subsidiary plans to step in and fill the gap by exporting its 6 cu. ft. "Frigeco" (France Internationale General Electric Co.).

Other companies, including General Motors (France) which makes the "Frigidaire," and Sud-Aviation, which manufacturers Caravelle jet planes in addition to "Frigeavia" refrigerators, are also planning to take advantage of what they see as a wide-open market. **First target in America: apartment house building contractors.**

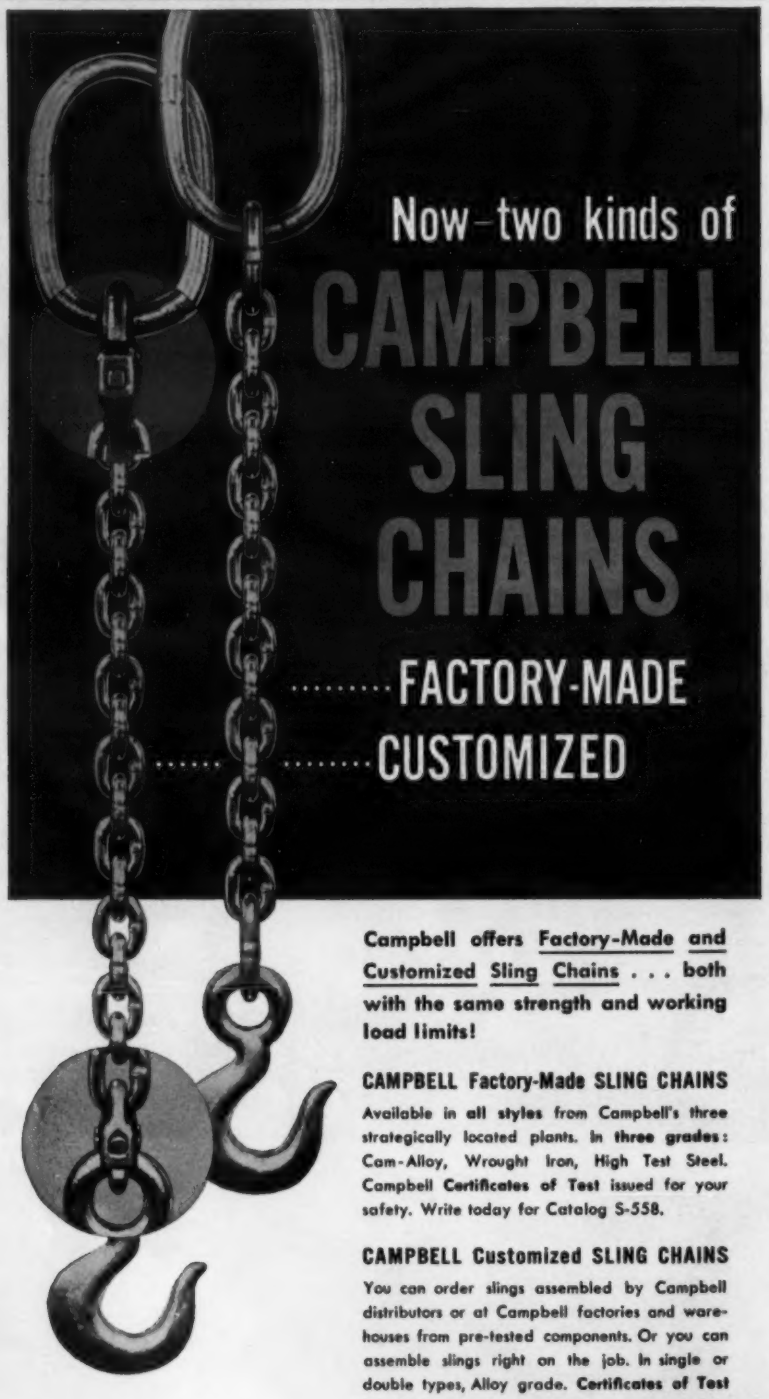
Prices will have to come down, admit the French manufacturers, from current levels of over $100/unit in order to compete with the German "Astra" and Britain's compact entry, which will be produced by Kenwood Manufacturing Co., Ltd.

• • •

Bombay—Indian textile manufacturers, concerned over rising labor costs here, have asked the official Central Wage Board for the Cotton Industry to freeze wages for five years.

The Board had unanimously recommended a basic wage increase of from $1.26 to $1.68/month for all textile workers, who now earn anywhere from as high as $6.30/month in Bombay to as low as $3.78/month in Patna. (With government cost-of-living supplements, workers average a total of about $23.43/month.)

The industry, however, is worried lest any further pay boosts threaten its competitive position with other cheap-labor countries in Africa and the Middle East.



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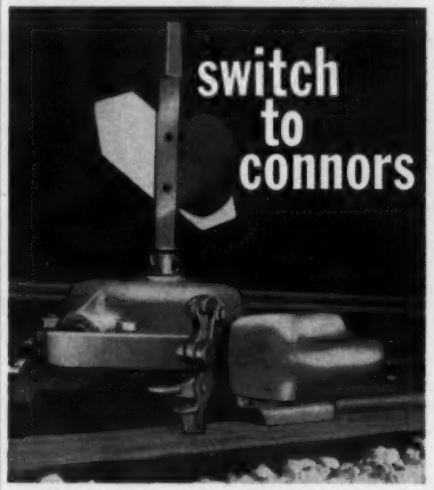

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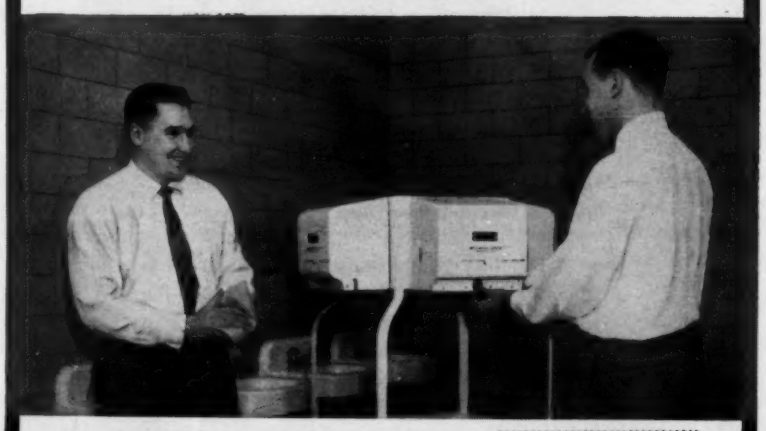

Here is a typical case history of what happens when a consumer tests Turn-Towls against the towel service in use. This happened to a national firm's Buffalo (N.Y.) division.

You can save with Turn-Towl service too. Write for name of nearest distributor now.

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Foreign News In Brief

Melbourne — Serious production breakdowns have dramatically changed the steel position in Australia. As a result surpluses, some of them slated for the U. S. market, have suddenly been transformed into shortages. Imports will be considerably increased in the near future.

At the same time, a serious shortage is developing in tinplate supplies and large orders have just been placed abroad, especially in Japan. These shortages are believed to be of a temporary nature and the situation should improve in the second part of 1960.

Paris—French machine tool manufacturers will put their latest wares on display at a major industrial exposition on the outskirts of Paris Sept. 9-18.

Exhibits at the machine tool show, the first of a series that will be held every two years from now on, will include metalworking machinery, woodworking machinery, plastics forming machinery, metal degreasing equipment, test equipment and machine tool accessories. The show will group both French and imported machinery by types—lathes, milling machines, specials, etc.

London—British Overseas Air ways Corp. may strengthen its long-range services by the purchase of a number of Super VC Ten jet airliners from Vickers-Armstrong Aircraft Co.

BOAC has made no official announcement as yet, but an order is understood to be under active consideration. If the project goes ahead, the airline would bring the jet airliners into service around 1964.

Vienna, Austria — Hungary plans to invest about $85 million annually in its chemical industry during the 1960-65 second Five-Year Plan, the Hungarian state news agency reports.

The expansion will signal a definite turn toward carbon hydrates, mineral oil, and natural gas as raw material sources, the report said. Two-thirds of the chemical industry investments during the next five years will go to fertilizer, plastics, and synthetic fiber industries.

Ottawa—A $66 million contract for natural gas delivery to the U. S. was announced last week by Northern Ontario Natural Gas Company Ltd. and Trans-Canada Pipelines Ltd.

The contract, covering 17 years, calls for 160 billion cu. ft. of gas. Northern Ontario originally opposed Trans-Canada's application to the Natural Energy Board for permission to export the gas to the U. S.

Bonn—The House of Siemens, Germany's leading electrical equipment producer, reported record gross sales of $949 million for the business year ending September 30, 1959. It also predicted a solid 10% increase for the current year.

Communications and electromedical equipment led the sales advance, jumping 18%. In comparison, heavy electrical equipment showed an increase of less than 1%. Consumer and household appliances on the other hand showed a healthy advance of about 9%.

London—Government spokesmen are worried about the labor situation in Britain and are expressing a growing concern at the prospect of higher wage demands this year. Automobile strikes have already crippled production by three of Britain's manufacturers — British Motor Corp., Standard Triumph International, and the Rover Co. At the same time, a major rail strike also is threatened.

Japanese Steelmakers Now Eye Africa for Ore

Tokyo — Thriving Japanese steelmakers are eyeing undeveloped African ore fields as their newest possible source of supply.

While Canada, India, and Australia have also been under consideration by the steel industry here, a recent Japanese steel mission found that the African continent offered these advantages:

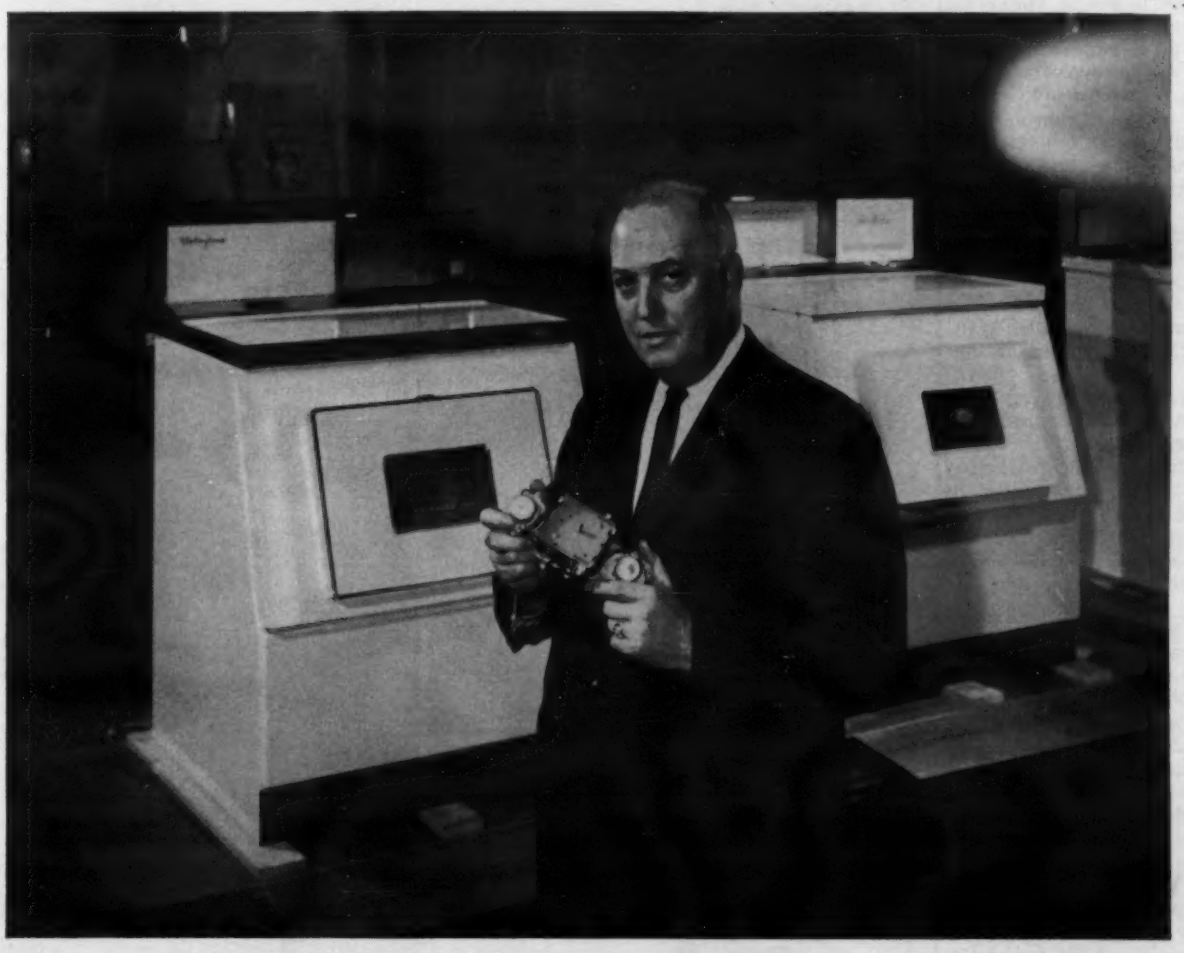
• **Low freight rates.** While Canadian and African mines are about equidistant to Japan, the steel mission found that, at present, African freight rates are about the lowest in the world.

• **Loading facilities.** While iron content of Indian ore (65%) is superior to African (62%), loading facilities in Africa are better, the mission found.

• **New mines.** A 40-million-ton iron vein has recently been discovered in Swaziland, where business leaders have reportedly expressed a desire to do business with Japan.

• **Greater resources.** Although plans are currently under way for Japanese steelmakers to develop India's Bailadilla iron fields, the project has aroused intense competition. Africa, the steel mission felt, offers enough room for everyone.

Current plans call for Kobe Steel to develop the South Rhodesia mines, while Yawata Iron & Steel and Fuji Steel will exploit the Swaziland fields. Mammoth ore carriers are reportedly already under construction in both areas, and development of the mines may get under way by next year.



"When I buy components,

I look for RELIABILITY"

. . . says Mr. W. E. Ullom, Purchasing Agent of Westinghouse Electric Corporation's Electric Appliance Divisions, shown here with the new Westinghouse Laundromat. "This means more than just product reliability—which we *always* expect. Equally important is the reliability of the supplier for meeting delivery dates—whether for normal or emergency orders . . . a dependable follow-through from sales to shipping . . . a genuine interest in working closely with us to solve our problems. We favor the supplier who has a reputation for leadership in developing both new products and manufacturing methods, who provides design and cost consultation, and suggests ideas for bettering our products at lower cost. We've dealt with Mallory for over 20 years."

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See MALLORY for:

- Mercury and Zinc-Carbon Batteries
- Capacitors
- Controls
- Timer Switches
- Vibrators
- Contacts
- Special Metals
- Electronic Assemblies
- Welding Materials

For New Markets, New Departments

Dow Chemical, Polymer Corp., and General Electric Set Up Departments to Handle Customer Needs

The fruits of research and development—mainly new products, processes, and applications—have created new marketing opportunities throughout industry.

Companies are attempting to capitalize on these opportunities by setting up new departments and divisions to handle the specific new products, product lines, or services. Here are some examples:

Tulsa—A new Product Sales Organization has been formed here by Dow Chemical Co.'s Dowell Div. to handle marketing of specialty products for the petroleum and mining industries.

The new sales department will push "a growing list of specialty products" as well as Dowell's current line of paraffin solvents, corrosion inhibitors, and drilling fluid additives to prevent lost circulation. These had formerly been handled by the company's district sales and service offices.

The new operation will be under the direction of H. E. McNeill, former Product Sales Manager. McNeill predicted his department would mean "better sales coverage, improved customer service and more efficient operations."

Plans for the new marketing group have already resulted in placement of additional sales and service personnel in several states, company officials said. Warehouses for storage and distribution of Dowell specialty products are now established in many areas, and "new ones will be added as required."

First of the new facilities to be added is a brine storage terminal, which has just started operations in Berwick, La. Mixing, storing, and transfer equipment are all located on the Berwick waterfront.

New York—Polymer Corp. has set up two divisions to take over sales development and service engineering of the company's new coating system and basic resins.

Whirlclad Div., which replaces the now-extinct National Polymer Products Inc., will make and sell Corvel fusion bond finishes and control the Whirlclad Coating System, a patented process for coating materials with polyethylene, nylon, epoxies, cellulosics, and vinyls.

Whirlclad has an exclusive license to the process, which is owned by Knapsack-Griesham, Frankfurt, Germany.

Polymer's other new division, the Molding Resin Div., will assume the activities of National Polymer Inc., which includes producing and marketing Nylatron and Nylasint, the company's line of polyamide and nylon molding powders.

Owensboro, Ky. — General Electric Co. has set up an "Advanced Product Planning Operation" to study opportunities for developing new products for use in electronic equipment.

The new department, which will operate out of GE's Electronics Components Div. here, will consist of "thinking" engineers to develop new components for the field of electronics.

Hagerstown, Md. — Pangborn Corp., a leading manufacturer of blast-cleaning abrasive and dust control equipment has established a new Vibratory Finishing Div.

The division will handle Pangborn's new line of finishing machines, based on the principle of air-cushioned vibration, which, company officials claim, "speeds precision finishing by up to one hundred times."

Pittsburgh, Pa.—A new sales firm, Wheatland Electric Products Co., has been formed here, to market its own line of standard and specially designed electrical products.

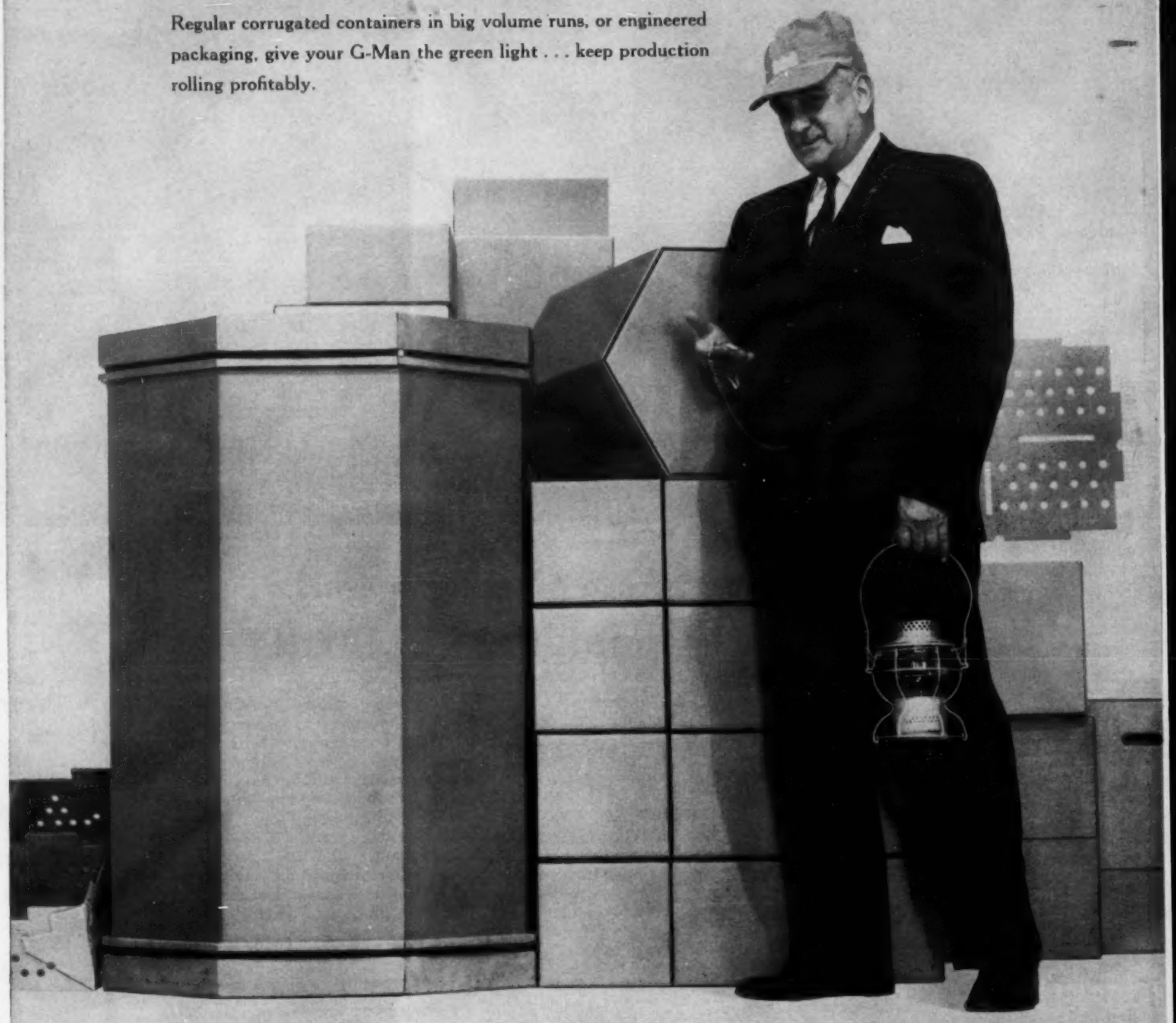
The new company's products, manufactured by the wholly-owned subsidiary, Wheatland Metal Manufacturing Co., will be sold through distributors to electrical contractors and industry.

WHITE SOX HEAD, Bill Veeck (center), spoke before the South Bend purchasing agents last month. With him are H. J. Baker, president of the group, left, and J. C. Adams, public relations chairman, right.

GAYLORD DEPENDABILITY
KEEPS YOUR PRODUCTION ROLLING

You get a clear track to corrugated boxes when you signal Gaylord to start the run. In all lines of industry, Gaylord has a well earned reputation for delivering the packaging . . . so you can package and deliver the goods . . . on schedule.

Regular corrugated containers in big volume runs, or engineered packaging, give your G-Man the green light . . . keep production rolling profitably.



CROWN ZELLERBACH CORPORATION
GAYLORD CONTAINER DIVISION

Gaylord Boxes

IN CANADA - CROWN ZELLERBACH CANADA, LTD. VANCOUVER, B. C.

HEADQUARTERS, ST. LOUIS
PLANTS COAST TO COAST

Chemical Industry Sets Its Cap For $5.2 Mil. Savings on Tanks

New York—The chemical industry has kicked off a standardization project that could mean minimum savings of at least $5.2 million annually.

The new project, involving "ordinary storage tanks" was submitted recently to the American Standards Association by 25 representatives of leading chemical companies that make up the Manufacturing Chemists Association. The ASA voted immediate approval of the proposal.

"It is conservatively estimated," said the MCA, "that savings in the range of $5.2 million annually will accrue to the chemical industry when the full impact of this program is realized."

Ordinary storage tanks now cost chemical manufacturers some 4% of their total capital outlay each year, the MCA delegation told the ASA. Standardization would reduce this cost by "at least 10%," they added.

"Until now," one chemical company representative pointed out, "whenever a buyer wanted to purchase such a tank, he had to go through the entire process of getting engineering drawings, with all the specifications, including alloy type, wall thickness, and various other dimensions—just as if he were designing an elaborate processing tank."

The cost of the engineering time involved is immeasurable, he added, and is not included in the 4% capital costs estimate his group mentioned in its request to the ASA.

Although the initial request also called for ASA help on process tanks, the project was eventually boiled down to include storage tanks only.

The standards association is now trying to fulfill the MCA's final prerequisites for tanks "designed for atmospheric pressure service in various capacities ranging from 100 to 30,000 gallons with dimensions considered the maximum for transportation by a common carrier."

At the same time ASA was voting approval of the chemical project, the standards group announced important changes in black and white film exposure indexes.

The film rating changes, which came as a result of "rapid developments in the art and techniques of photography," involve reduction of the safety factor from about 2.5 to 1.2 (the same as for color film), establishment of a new logarithmic scale for expressing film speed, and adoption of new methods for determining sensitivity of negatives.

Toro Claims a Better Hard-Coating Method

Minneapolis—A leading power lawn mower producer, Toro Manufacturing Corp., has come up with a new way to hard-coat aluminum parts "10 to 50 times faster than conventional methods."

The new process, say company officials, is the result of a four-year Toro quest for an abrasion-resistant reel, and surpasses "older hard-coating methods in electrical efficiency, reduced refrigeration requirements, and lighter color of end product."

Like other aluminum anodizing processes, the Toro method electro-chemically coats the metal with saphire-hard (Mohs' value: 9) aluminum-oxide film. But, says Toro, the new process has "an ability to utilize very high currents without 'burning' the aluminum."

Toro engineers say their process increases ordinary current densities of 25 to 100 amps/sq. ft. 20 to 40-fold, permitting greater speed. "Ordinary processes require between 10 and 50 minutes to build a protective surface coating 0.001 in. thick," one company official explained. "Toro needs one minute for the same job."

As a result of the shorter exposure to electrolytic acid, lighter-shade coatings are produced, ranging from silver to medium gray, allowing the metal to be dyed in a wider assortment of colors.

In addition, the Toro engineers claim the process operates at an electrolyte temperature of 70 degrees F., eliminating much of the refrigeration necessary for other methods.

Where Can I Buy?

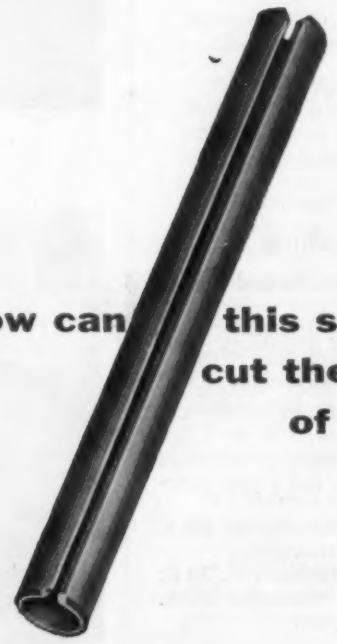
Some products are easy to locate, others difficult. Perhaps you can help one of our readers who knows exactly what he wants but doesn't know where to get it. And keep in mind that you can make use of this PURCHASING WEEK *service at any time.*

While you are answering our reader's request, would you also send us a carbon copy of your answer.

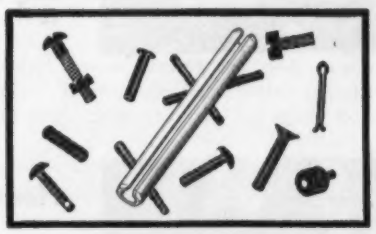
"We are looking for a source of supply for a flexible plastic tie which, I believe, is called Poly Pak Seal.

It is 5-in. long, ¼-in. wide with two slots as shown above."

John Guthrie,
Purchasing Agent
Chilton Greetings Co.
76 Atherton Street
Boston 30 (Jamaica Plain), Mass.

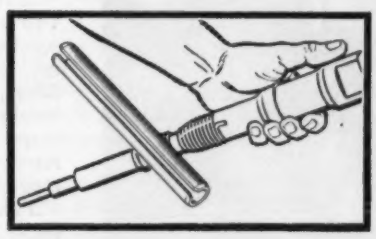


How can this simple fastener cut the cost of your product?



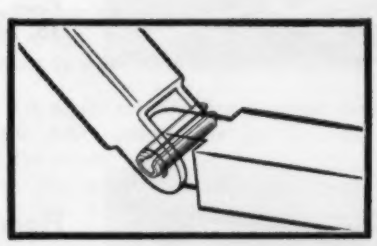
Rollpin aids standardization and reduces inventory

Rollpin readily replaces taper pins, grooved pins, straight pins and set screws; it can be used as a locating dowel, hinge pin, cotter pin, stop pin or, in some applications, even as a rivet. Thus, when you standardize on a Rollpin you can drastically reduce the variety of fasteners in your inventory—save money in purchasing, storage space and stock handling.



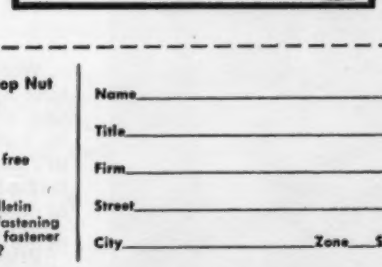
Rollpin simplifies production processing . . . saves man-hours

When you use Rollpin you can eliminate costly precision drilling, or tapping operations. And there's no need for any secondary locking operation—such as lock wiring or peening. That's because Rollpin is a slotted tubular steel spring whose chamfered ends drive easily into standard production-drilled holes, compressing as driven. The spring tension against the hole walls retains Rollpins securely against severe vibration. Independent studies have shown that installed costs of Rollpin are as much as *91% less* than those for a dowel pin or *95% less* than the installed cost of a taper pin.



Rollpin simplifies product maintenance

Only a drift pin or standard punch is required to remove a Rollpin. The slotted tubular shape and the spring action principle do not damage hole walls or enlarge the original hole diameter. Consequently the same pin is easily re-inserted and can be used again and again. Mail our coupon today for the complete Rollpin story.



ROLLPIN®

a product of
Elastic Stop Nut Corporation of America

Dept. RS8-219 Elastic Stop Nut
Corporation of America
2330 Vauxhall Road
Union, New Jersey

Please send the following free fastening information
- ☐ Rollpin bulletin
- ☐ ELASTIC STOP® nut bulletin
- ☐ Here is a sketch of a fastening problem. What ESNA® fastener would you recommend?

Name_____
Title_____
Firm_____
Street_____
City_____ Zone___ State_____

P-W Goes to the Maintenance Show

Here's your weekly guide to . . .

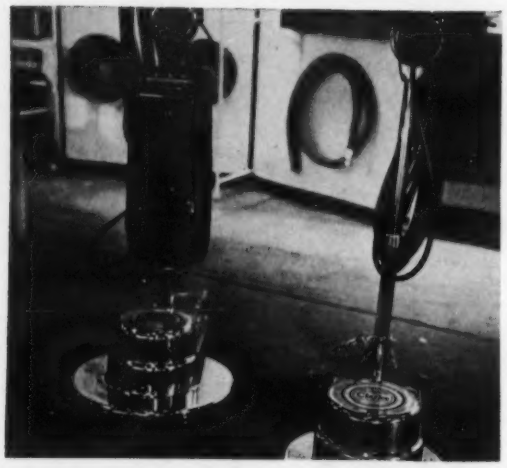
Fluorescent Paint

Easy to See

Four times brighter than regular colors, lacquer and enamel types last indefinitely indoors and up to two years outdoors. Dangerous areas, safety equipment and passageways are identified quickly. Paint is sprayed, rolled, or brushed on surfaces.

Price: $15.90 gal. (paint); $10.65 gal. (sealer) Delivery: immediate.

Lawter Chemicals, Inc., Dept SN, 3550 Touhy Ave., Chicago 45, Ill. (PW, 2/15/60)



Floor Machine

Scrubs and Waxes

Machine uses variety of brushes for polishing, waxing, scrubbing, or sanding any type floor surface in plant or office. Totally enclosed motor, (⅓ to 1 hp) drives brushes at constant speed. Unit has 1 year guarantee.

Price: $159.50 to $475. Delivery: immediate.

Clarke Machine Co., 30 E. Clay Ave., Muskegon, Mich. (PW, 2/15/60)

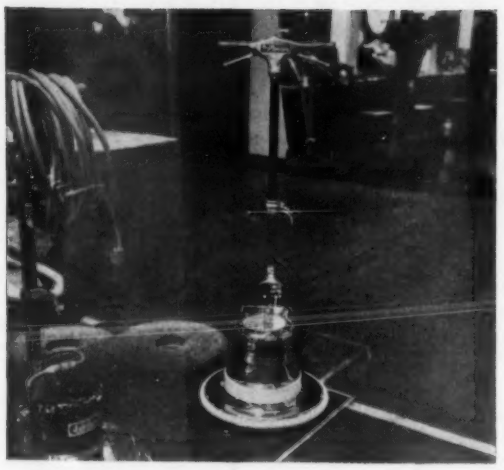
Fluorescent Finish

4 Times Brighter

Safety markings of fluorescent enamels and lacquers stand out. Three-step process uses base coat, paint, and protective coating. Lacquer is sprayed, enamel is brushed or sprayed in red, orange or green shades.

Price: $16.21 gal. (paint). $10.80 gal. (sealer). Delivery: immediate.

Switzer Bros., Inc., 4732 St. Clair Ave., Cleveland 3, Ohio. (PW, 2/15/60)



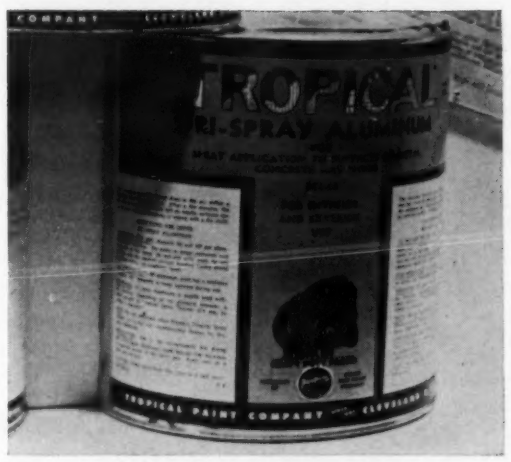
Floor Machine

Offers Two Speeds

Two speed floor machine, 140 or 190 rpm, polishes or scrubs floors, shampoos rugs, or reconditions concrete floors. Handle adjusts to suit height of operator. Machine stops safely when hands are removed from motorcycle-type switch.

Price: $377 to $468. Delivery: immediate.

Pullman Vacuum Cleaner Corp., 25 Buick St., Boston 15, Mass. (PW, 2/15/60)



Aluminum Paint

No Overspray

Aluminum paint needs no drop cloth because it dries as it falls. Overspray can be brushed or blown away. Desired mil thickness builds up with quick passes by spray gun over metal, wood, concrete, or plaster surfaces.

Price: approx. $7 gal. Delivery: immediate.

Tropical Paint Co., 1210-52 W. 70th St., Cleveland 2, Ohio. (PW, 2/15/60)

Floor Wax

Can Be Buffed

Water-emulsion finish resists water spillage, spotting, and dirt pick-up. Floors can be buffed after heavy traffic to restore finish in entrances, traffic lanes. Safe on all kinds of floors, 1 gal. covers 2,000-3,000 sq. ft.

Price: $3.80 for 1 gal. Delivery: immediate.

S. C. Johnson & Son, Inc., 1525 Howe St., Racine, Wis. (PW, 2/15/60)

Fire Extinguisher

Expels Dry Chemical

Extinguisher uses dry chemical to put out fires in flammable liquids, electrical equipment, LP gas, in areas free of dust and residue. Operated by single lever, extinguisher weighs 10 lb. when full. Recessed gage shows amount left.

Price: $19.85. Delivery: immediate.

Walter Kidde & Co., Inc., Belleville 9, N. J. (PW, 2/15/60)

New Products

Another PURCHASING WEEK service: Price and delivery data with each product description.

Seating Center

Frees Plant Space

Table and 12 chairs are combined in one folding, portable unit for cafeteria and in-plant feeding areas. Portability frees space for other work. Plywood or molded plastic chairs anchored to 10-ft. x 30-in. table swivel 180 deg for easy access.

Price: approx $265. Delivery: immediate.

Sico Mfg. Co., Inc., 5215 Eden Ave. S., Minneapolis 24, Minn. (PW, 2/15/60)

Epoxy Adhesive

Mounts Junction Boxes

Two parts of epoxy adhesive in divided cup are mixed together and applied to back of junction box for direct mounting on concrete, cinder block, tile, or metal surfaces. Waterproof and acid resistant adhesive eliminates hole drilling. One cup does 8 to 10 boxes.

Price: $1.98 cup. Delivery: immediate.

Permacel Tape Corp., U. S. 1, New Brunswick, N. J. (PW, 2/15/60)

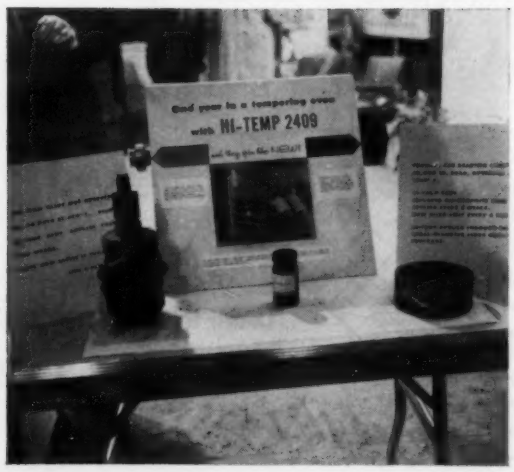
Patching Kit

Makes Quick Repairs

Kit contains resin, putty, hardener, Fiberglas cloth tape, mixing and measuring tools for on-the-spot repairs of plastic, wood, or metal. Piping and tanks are ready for sanding or painting 20 min. after repairs are made.

Price: $1.70. Delivery: immediate.

Fibre Glass-Evercoat Co., Inc., Blue Ash Road, Cincinnati 36, Ohio. (PW, 2/15/60)



Synthetic Lubricant

Works to 1,000 F

Synthetic, non-petroleum lubricant applied to roller bearings, casters, and valves remains effective to 1,000 F in furnaces and process systems. Glossy, dry lubricating film does not form gums or carbon at high temperatures.

Price: $1 a lb. Delivery: immediate.

E. F. Houghton & Co., 303 W. Lehigh Ave., Phila. 33, Pa. (PW, 2/15/60)

This Week's

Product Perspective

FEBRUARY 15-21

● **Now that most companies have made a strong dent in cutting direct production costs, they are focusing anew on indirect expenses and maintenance costs are a prime candidate.**

It seems improbable that maintenance operations can ever be automated to the extent of production routines, but exhibits at the annual Plant Maintenance Show in Philadelphia last month (see pages 24-25) indicated that **there are many areas where money-saving ideas can be applied.**

Here are some new developments that are worth considering:

● **Mechanized equipment**—Lift-A-Loft Co.'s mechanical lift can fit through a standard doorway, yet reach up to clean a 25-ft. ceiling. Company calculates that it costs **$2.45 to service a fluorescent ceiling fixture using two men and a ladder.** Cost to do same job using **one man and a lift: 43¢ a light.**

● **Floor surfacing materials**—Manufacturers claim that cement additives, used only sparingly not too long ago, are now going into 80% of new plant installations. Additives give the floor special long-wearing qualities to combat chemicals, extreme wear, etc.

Longer wear can also be built into existing floors. Here it's a question of **matching the compound to the need.** Few people argue the point that **epoxies are the hardest, most resistant kind of floor topping. But they are also expensive.** If your plant floor will not be subjected to extreme wear or chemical attack, a cement or asphalt-based repair job might be your best bet.

New spray techniques for applying epoxies may be the needed cost breakthrough. Spray guns have been developed to apply the epoxy much like paint.

● **Concrete fasteners—combined masonry drill and anchor, makes fastening into concrete a one-man, one-step operation.**

● **Partitions**—Outside walls (on prefabricated buildings) are being designed to be movable. **Now you unfasten four bolts, don't have to rip down a plaster wall.**

● **Towels**—Paper wiper manufacturers say they now have about 5% of industrial wiping market. They claim their wares (at about ¼¢ each) offer large potential savings over cloth variety, but **have to overcome employee resistance to change.**

One company (Textel Automated Shop Towel Service) has come up with a new approach to eliminate towel thefts. Textel's automatic dispensing machine will release five clean new towels only when five dirty ones have been deposited in the slot. The company says price, including towel and laundry costs, will vary from 1½¢ to 2½¢ a towel depending on volume and location.

● **Water coolers—they are moving from floor to wall.** At least three companies (Oasis, Westinghouse, and Kelvinator) are ready to market on-the-wall coolers. Main reason for the new type models is maintenance—dirt can't gather behind or underneath the wall model.

● **Industrial TV**—Designed for a variety of maintenance functions, industrial TV got a shot in the arm when **Motorola announced its new line of closed circuit models at the show.** A Motorola representative told PURCHASING WEEK that the company believes **that TV's industrial potential has never been exploited.** Reason: Everybody in the business was selling industrial TV as a sideline, not putting full effort into it. Motorola is out to remedy this **by going after the market in a definite, organized manner.**

● **Fire extinguisher**—A major **extinguisher company says it will soon come out with an all-purpose ABC extinguisher** (A is wood, B burning liquid, and C electrical). At the present time, no one extinguisher can be used for all three types of fire. The new extinguisher will spray a dry powder that changes composition when it hits the heat. Naturally, it will be more expensive than a single-purpose extinguisher, but much cheaper than having to stock two or three different varieties.

● **Cleaning chemicals**—These products are being developed for specific tasks—such as removing epoxy resins from parts. Object is to reclaim otherwise spoiled pieces, reduce needed elbow grease. **At the same time, universal detergents are being made for general all-purpose plant cleaning.**

● ● ●

● A method of getting to the bottom of disputes that has long been associated with the shadowy world of bank robbers, murderers, and crime in general is finding a place in the plant. **The Globe International Detective System is using lie detectors to solve company security problems.** They claim the instrument can deter petty theft, solve union-management arguments, pinpoint embezzlement and mediate work disputes.

Your Guide to New Products

(*Continued from page* 31)

Photocell

Switches Lights

Photo cell switch automatically turns outdoor lights on at dusk and off at dawn. Switch fits standard flood light junctions. Totally enclosed aluminum construction protects it from weather.

Price: $18.90 to $20.50 (650 or 1,500 watts). Delivery: immediate.

Com-pak-ett Mfg. Co., Allegan, Mich. (PW, 2/15/60)

Hoist Switch

Sealed Against Corrosion

Switch has 2 to 6 push buttons completely encased in rubber for maintenance-free operation of power hoists. Hanging type device has outer shroud rings for each button to prevent accidental actuation. Shipped ready to install.

Price: $16 to $48 (2 to 6 stations). Delivery: immediate.

Joy Mfg. Co., 1201 Macklind Ave., St. Louis 10, Mo. (PW, 2/15/60)

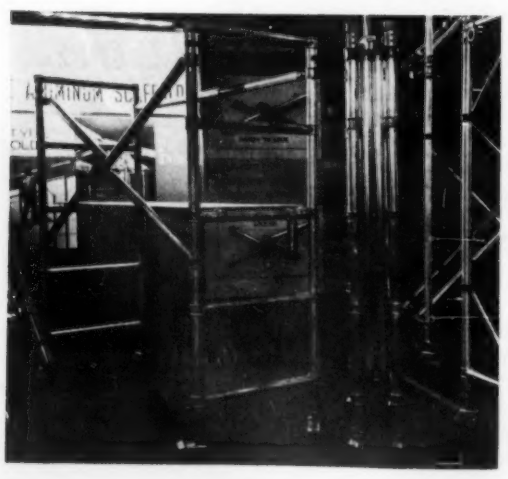
Stepladder

Electrically Safe

Fiberglas-reinforced stepladder is lightweight, suitable for all weather use in plants. Recommended for electrical work, ladder withstands 100,000 v applied between rungs. Available in 3 to 18-ft. lengths, flat steps and back rungs of ladder are of aluminum.

Price: $4.50 per ft. Delivery: immediate.

Putnam Rolling Ladder Co., 32 Howard St., N. Y. 13, N. Y. (PW, 2/15/60)



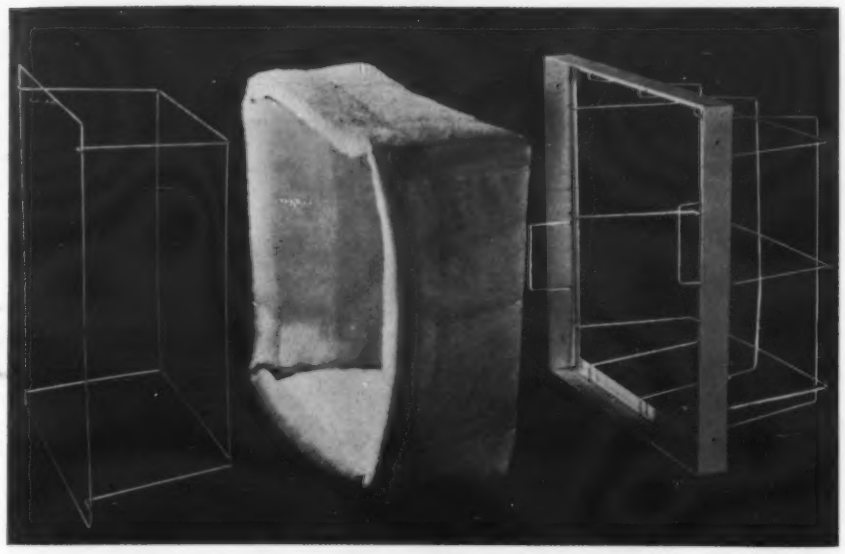
Portable Scaffold

Easy to Set Up

One-piece, span-type scaffold with built-in braces can be quickly erected by one man without tools. V-braces unfold and automatically lock together to form rigid X-brace. Use of aluminum in 6½ x 10-ft. scaffold reduces weight. It rolls through 30-in. doorways.

Price: $188 to $198. Delivery: immediate.

Up-Right Scaffolds, 1013 Pardee St., Berkeley 10, Calif. (PW, 2/15/60)



Open-Box Air Conditioner Filter Can Outdo Throw-Away Filters, Makers Say

New York—Union Carbide Development Corp. has come up with a new filter for industrial air conditioners that it says outlasts conventional throwaway and permanent filters by a wide margin.

The new filter gets increased efficiency from its unique shape (it looks like a cube) and from a special filtering medium of a processed batt material, the company said.

Shaped like an open box, the ULOK filter is made up of three components (photo): a disposable 2-in. thick filtering medium, a retaining basket that holds the filter to the air conditioner, and a rust-proof retaining wire that fits inside the filter and holds it rigid. No modifications are needed to adapt the filter to existing installations.

Here's how the filter works: As air enters the filter it deposits dirt on the face of the cube. The air is slowed down and shunted to the sides, thus greatly increasing the effective filtering area. In operation, the coarse material continues to be caught on the face, while the large filter area of the four sides traps the fine particles.

Although the filter will sell for about 3½ times the price of an equivalent conventional filter ($7 as compared to $1.98 for the 20x20x8-in. size), users will save on maintenance costs because of the fewer number of filter changes needed. Union Carbide estimates that it costs between 50¢ and $1 to change a filter.

The medium is unaffected by moisture and is listed as Class II by the Underwriters Laboratory. It is rated at 0.04 in. pressure drop at 2,000 cfm. Units are available with standard face areas of 20x20, 20x25, 16x20 and 16x25 in. in depths of 8, 11 and 20 in.

Union Carbide will market the filter line through distributors. They are available for immediate delivery.

Special Construction for Structures

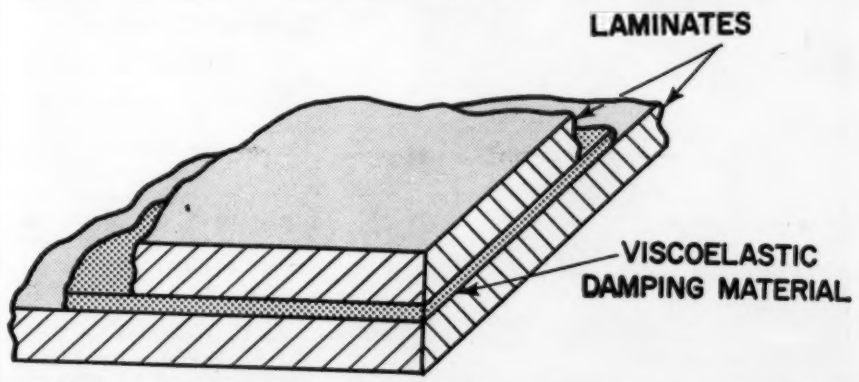
New York—Barry Controls, Inc., Watertown, Mass. announced a new approach to shock and vibration problems of the space age—structures with built-in high-damping characteristics.

The new structures, called Rigidamp, outwardly resemble conventional members. However, their usual resonant response (and that of typical structures made of them) is said to range from only 5 to 10 times the excitation vibration throughout the frequency range. This is in sharp contrast to conventional structures where response is amplified some 60 to 300 times.

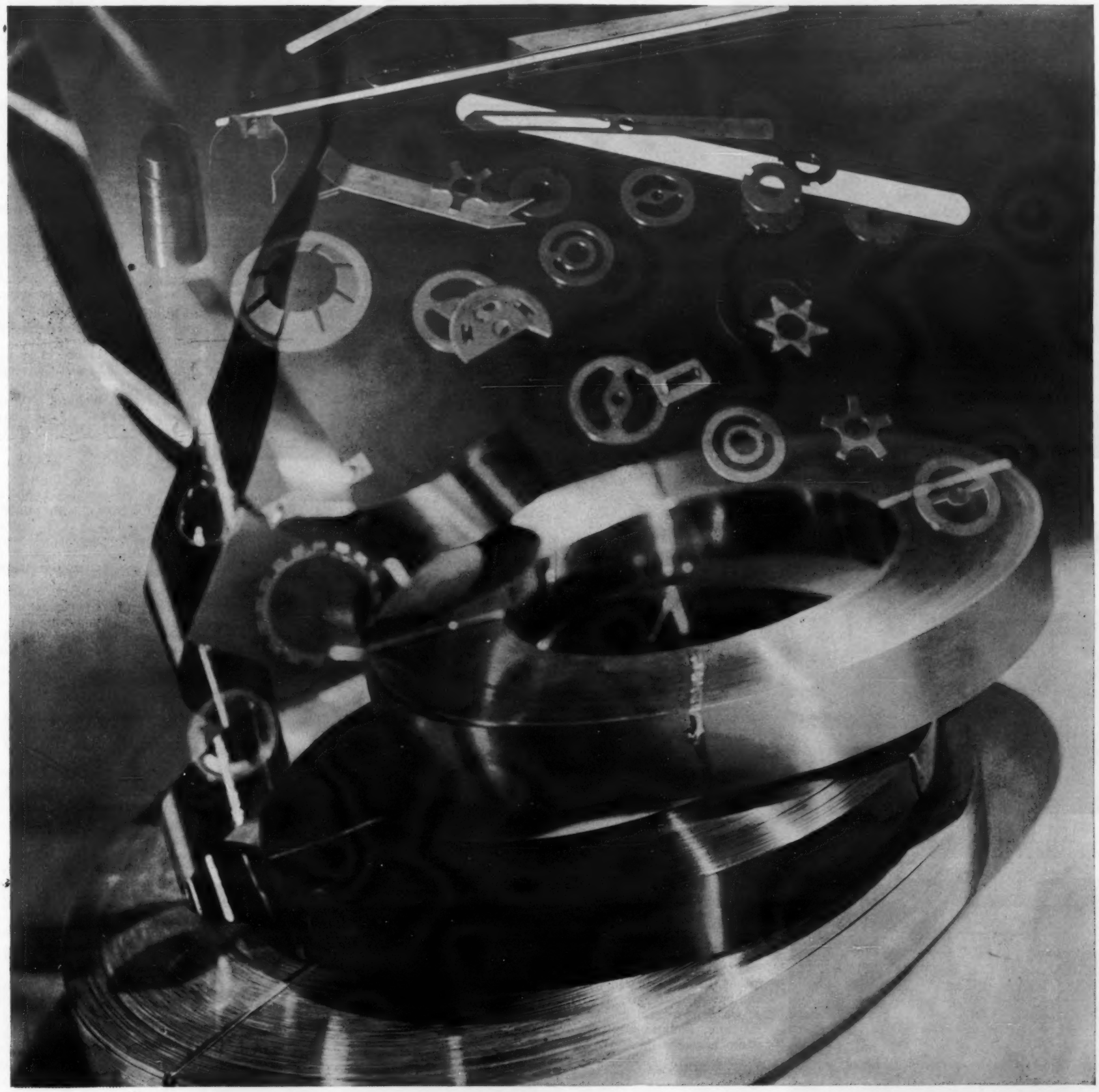
The materials get their high-damping action from a special laminated and cellular construction. Sheets and thin rectangular section beams are made of laminations of conventional materials (either metal or plastic) separated by a viscoelastic damping medium. Under vibration, the separate laminations of structural material slide relative to each other, but this sliding is impeded by the special viscoelastic material. Most of the energy of resonance is absorbed in straining the viscoelastic layer in shear.

Possible applications of Rigidamp structures include electronic circuit boards, electronic chassis, shelves, dust covers, aircraft parts, test fixtures, missile skins, and relays. Although most of the research to date has been with metal structures, successful applications have been made with structural plastics as well.

According to Barry executives, the special damped materials can be formed and fabricated in the same way as the metals or plastics employed. Special techniques must be used, however, for optimum results. For this reason, Barry does not plan to market the damped structural members as materials, but will provide design and fabrication services to solve specific dynamic problems.



CROSS-SECTION drawing of damped laminated sheet shows how viscoelastic material is used as cushioning agent between laminate layers to absorb vibration impulses.



Quality in Ascendancy

The superiority of the vast number of products that are — and can be made from Roebling Cold Rolled Flat Spring Steel is a fact known throughout all industry.

You pay for mechanical and dimensional uniformity when you buy flat spring steel . . . you get it when you buy Roebling.

For information on how our products can help yours, write Roebling's, Wire and Cold Rolled Steel Products Division, Trenton 2, New Jersey.

ROEBLING

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The Colorado Fuel and Iron Corporation

Roebling... Your Product is Better for it

Your Guide to New Products

(*Continued from page 32*)

Water Cooler

Mounts on Wall

Cooler mounts on the wall, off the floor, with all plumbing concealed. Wall unit cuts maintenance because trash doesn't accumulate behind it and floor area under it can be cleaned readily. Available in 7 or 11 gal. capacity.

Price: Approx. $255 (7 gal.) and $269 (11 gal.). Delivery: May 1.

Westinghouse Electric Corp., Water Cooler Dept., Columbus 16, Ohio. (PW, 2/15/60)

Electrode

For Cast Iron

Low-temperature welding electrode in ⅛, $\frac{3}{32}$, and $\frac{5}{16}$-in. dia. repairs cast iron valves, fittings, or housings subjected to high water or air pressure. Applied with standard a-c or d-c equipment, deposits are machinable.

Price: $3.45 (lb. in ⅛-in. dia., 100-lb. lot). Delivery: immediate.

Eutectic Welding Alloys Corp., 40-40 172nd St., Flushing 58, N. Y. (PW, 2/15/60)

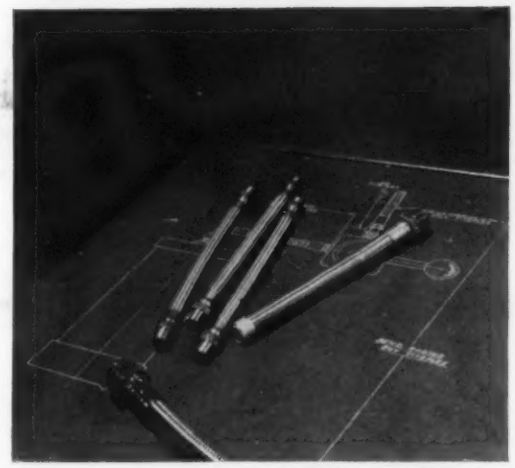
Closed Circuit TV

Shows Plant Activity

Basic industrial camera, with lens, cable, and 14-in. monitor, is designed for a variety of in-plant closed circuit TV viewing. Camera weighs only 12 lb. and measures 5½ x 7 x 11-in.

Price: $2,000 (camera, lens, monitor, and cable). Delivery: 6 wk.

Motorola Inc., 4501 W. Augusta Blvd., Chicago 51, Ill. (PW, 2/15/60)



Steam Hose

Resists Corrosion

Bronze wire woven around plastic intercore gives hose strength and flexibility to resist industrial chemicals, additives, or solvents. Hose line will not brittle, age, or work-harden after millions of flexing cycles at 400 F. Plastic material is heat resistant.

Price: $3 to $11 ft. (¼ to 1-in. dia.). Delivery: immediate.

Titeflex, Inc., 603 Hendee St., Springfield 4, Mass. (PW, 2/15/60)

Sump Pump

Needs No Adjustment

Heavy duty, ½-hp sump pump delivers 5,000 gal. per hr. at 10-ft. discharge head without adjustments, floats, or weights. Completely submersible, lifetime lubricated pump has corrosion-resistant construction.

Price: $287.50. Delivery: immediate.

Kenco Pump Div., American Crucible Products Co., 1305 Oberlin Ave., Lorain, Ohio. (PW, 2/15/60)

Conveyor Belt

Can Turn Corners

Steel mesh belt (2 to 48-in. wide) can turn corners down to a radius 2½ times the belt width. Open mesh construction gives quick drainage and reduces weight to 2.1 lb. per sq. ft. Available in galvanized and stainless steels.

Price: $4. sq. ft. (galvanized). Delivery: 3-4 wk.

Ashworth Bros., Inc., Winchester, Va. (PW, 2/15/60)

Steam Cleaner

No Fumes or Flame

Electrically powered, portable unit combines heat, pressure and solution to clean or deodorize materials without flame or smoke. Equipped with a 25 ft. vapor hose and a cleaning gun, unit can also coat parts with hard, rust-proof finish.

Price: $1,100. Delivery: immediate.

Homestead Valve Mfg. Co., Corapolis, Pa. (PW, 2/15/60)

Purchasing Week Definition

Light Sources

Fluorescent—Low-pressure vapor lamp uses ultraviolet energy from mercury-arc discharge to activate phosphor coating on inside bulb surface to produce visible light. Most popular industrial light source.

Incandescent—Lamp contains tungsten filament which heats up and glows when current passes through it. Less efficient light producer than fluorescent or mercury, incandescent lamps are used primarily in the home.

Mercury-Vapor—Lamp emits blue-green light caused by gas discharge at relatively low voltage. High-intensity light producer, but color quality and delayed starting time limit use to high bay lighting in combination with other light sources.

Quartzline—Newest light source, has an incandescent filament, but employs iodine compound to prevent lamp blackening. Produces great amount of light for size of bulb. **(PW, 2/15/60)**

Even Unskilled Factory Workers Can Operate DuMont's New Oscilloscope

Clifton, N. J.—Allen B. Du Mont Laboratories, Inc., has developed a new cathode-ray oscilloscope that it says can be used by unskilled factory workers.

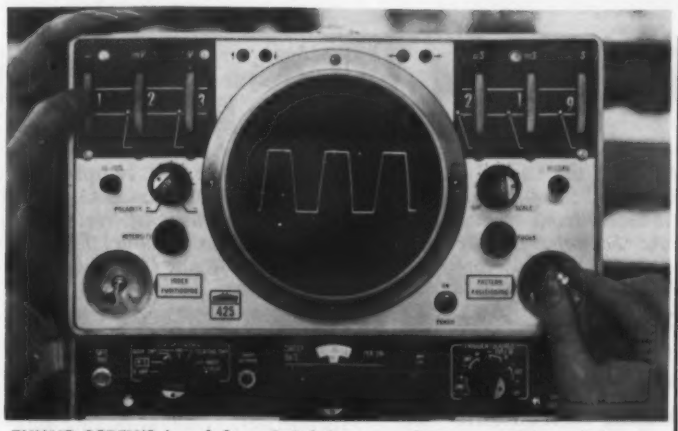
The new scope indicates directly in digits the peak-to-peak voltages, instantaneous voltages, and rise time of motors, capacitors, and rectifiers. Mathematical training is needed to interpret waveform patterns formed on the screen of conventional oscilloscope and to translate into digits.

Here's how the DuMont model 425 works: Two dots are superimposed on the scope and then maneuvered into position on the waveform by simple thumb wheel switches which actuate the digital display. An engineer must set up the scope for the waveform to be studied, but an unskilled operator then can take over. DuMont estimates that about 40% of operational time for an oscilloscope is cut out by the direct readout system.

The basic unit of the 425 consists of five modules that are separate mechanical and electrical entities. Each of these plug-together units can be taken out and replaced in less than 20 min.

DuMont is selling the 425 for $2,750 (without plug-ins) and expects it to get wide usage in electronics, laboratory work, medicine, nuclear work, and radar.

In the field of production control, it has the obvious advantage that unskilled operators can perform accurate (to 2%) and repeatable measurements on the assembly line. The instrument also can be hooked up as a go-no-go gage for use with external data processing equipment to provide permanent statistical data on production. The electrical capacities of each item passing down the line can be recorded.



THUMB SCREWS (top left and right) are used to set position of dots on oscilloscope waveform. Digital analysis of the curve can then be read directly and accurately from dials by an unskilled production line worker.

Worthington Corp. Sets 'Steam Power' Meetings

Harrison, N. J.—Worthington Corp., has announced plans for a series of nationwide "Steam Power Symposiums" to promote closer working relations with the electrical utility industry.

The program will consist of a wide screen color film presentation, a series of prepared visual demonstrations, individual product presentations and discussions by key Worthington executives.

Planned to operate over a number of years, the symposiums in 1960 will play host to leading utilities in about 15 cities.

Product Briefs

Cleaning devices operating on compressed air line uses vibrating stainless steel needles to clean residue and dirt from small opening and other inaccessible spots. Operating like an air gun, it cleans surfaces at 50 strokes per sec with little recoil. Unit weighs only 3½ oz and has an overall length of 13½-in. *Swissair Tool Corp., 7775 Sheridan Dr., Buffalo 21, N. Y.*

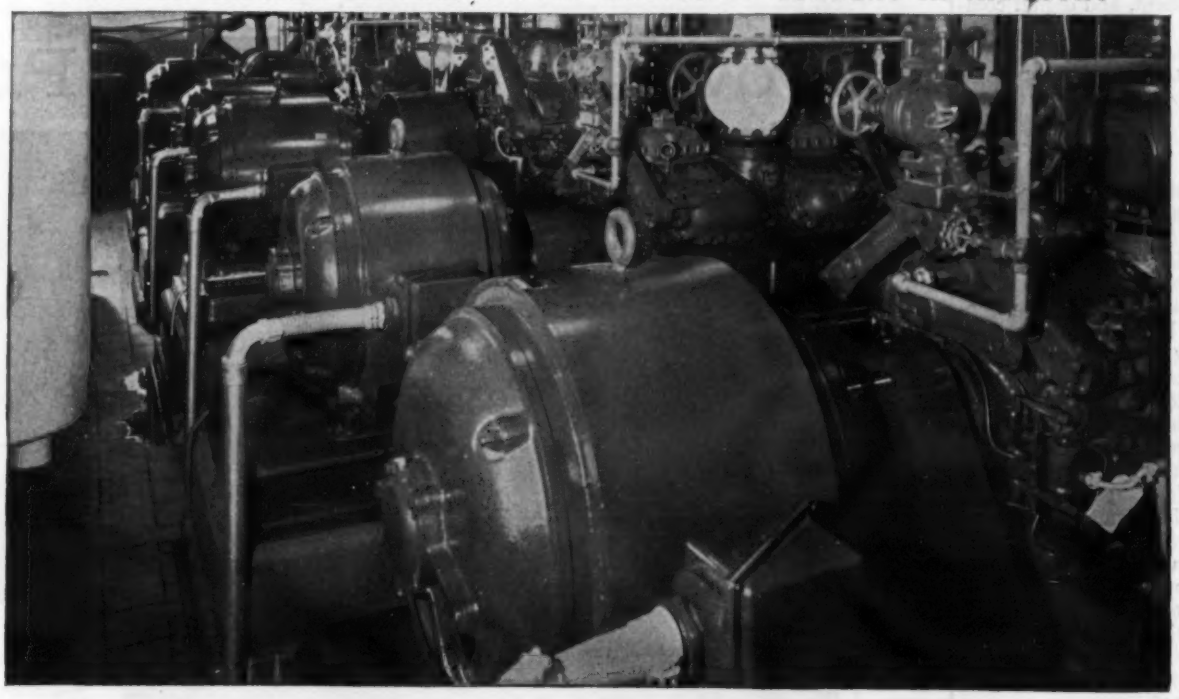
Power supply employs silicon rectifiers for laboratory, test bench, or original equipment use. Rated output is 300-500v dc at 0-50 ma continuous duty. Packaged for chassis or sub-chassis use, it can be ordered for rack mounting application. *Trans Electronics, Inc., 7349 Canoga Ave., Canoga Park, Calif.*

Transparent adhesive film printed to order is made of 0.0015-in. thick acetate for durable protective coatings on documents. Delayed, 24-hr., setting action permits material to be relocated. Washable and chemically stable film is available preprinted or plain in 20-yd. rolls and sheets up to 18 x 24-in. *Keuffel & Esser Co., Third & Adams Sts., Hoboken, N. J.*

Pocket-size thermometer shows at a glance the correct temperature between —30 F and +120 F. Complete with 24-in., gold finish chain, the thermometer is 7½-in. wide and 9½-in. high. *Spartus Corp., 2110 W. Walnut, Chicago, Ill.*

Centrifuge for chemical processing industries separates solids such as polyolefins, vinyl resins, titanium, and acrylic resins from liquid carriers with peak capacity of 30 tons per hr. Maximum drum speed of 1,300 rpm is provided by 75-hp motor. Swirling or dusting of solids within the housing does not occur. *Chemical Machinery Div. of Baker Perkins, Inc., 1000 Hess, Saginaw, Mich.*

WAGNER ELECTRIC MOTORS . . . THE CHOICE OF LEADERS IN INDUSTRY



End Voltage Drop and Line Disturbance Problems caused by starting BIG MOTORS . . .

Type RP polyphase motor in ratings to 500 hp with increment type starter.

Use Wagner Increment Motor-Starter Combinations

Increment starting is the easy, inexpensive way to limit the inrush of starting current in motors up to 500 horsepower. And, you do it *best* with Wagner Increment Motor-Starter Combinations . . . polyphase open-type, totally-enclosed, or explosion-proof motors and magnetic increment starters.

Line disturbances are reduced because current taken from the line is not broken during the starting period. Motors start sure and fast . . . reach full speed in a matter of seconds. And . . . Wagner combinations cost less than motors with primary resistance or auto-transformer type starters.

Two more plusses: The compact, relatively lightweight starter is easy to connect . . . needs very little attention. The motor requires only regular inspection, cleaning, and lubrication . . . maintenance is minimized.

While 2-step combinations are suitable for most applications . . . 3, 4, 5, or 6-step increment motor-starter combinations are available for installations where unusually low inrush of starting current is required. All meet the polyphase motor-starting requirements of AEIC-EEI-NEMA.

It's possible you can save money on your big jobs with Wagner Increment Motor-Starter Combinations. A Wagner Sales Engineer will help you. Call the nearest Wagner branch or write us for Bulletins MU-128 and MU-195.

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ELECTRIC MOTORS • TRANSFORMERS • INDUSTRIAL BRAKES • AUTOMOTIVE BRAKE SYSTEMS—AIR AND HYDRAULIC

Profitable Reading for P.A.'s

New Books

Today's Business Machines by Harrison Fisher. Published by American Technical Society, 848 E. 58th St., Chicago 37, Ill. 120 pages. Price: $4.95

This book offers a comprehensive look into what's available in business machines. Written in simple, easy to understand language, it discusses the principles of operation and applications of standard machines. Clear descriptions of each machine will enable the purchasing agent to select the right equipment for each specific job.

The book is divided into nine chapters: typewriting machines, mail handling, dictating, duplicating, microfilming, adding and calculating, accounting, punched card equipment, and digital computers.

Dynamic Management Decision Games by Jay R. Greene and R. L. Sisson. Published by John Wiley & Sons, Inc., 440-4th Ave., New York 16, N. Y. 84 pages. Price: $2.95.

This book is designed to introduce management men to the techniques of developing decision-making through the playing of simple games.

The book contains seven non-computer business games that cover every level of management in a business organization. They reflect a wide variety of business problems such as production control, inventory control, sales management, retailing, and personnel. Each game includes background information and referee material.

Here is a valuable opportunity to gain the background and experience necessary to make important business management decisions.

New Films

Numerical Control

22 min., 16 mm describes company's numerically controlled machine tools system. Film is designed to show production management the operation, advantages, and cost savings resulting from the use of numerically controlled machine tools. Film is available from *Industrial Controls Section, Bendix Aviation Corp., 21820 Wyoming Ave., Detroit 31, Mich.*

From the Manufacturers

Atomic Instruments

Describes atomic instruments, systems and accessories. Includes technical data and specifications on company's analytical scintillation systems, special medical systems, instruments such as scalers, analyzers, rate and survey meters, power supplies, etc.; also contains cable and compatibility charts, optimum counts charts, radioisotope listings, etc. *Catalog A-4 Baird-Atomic, Inc., 33 University Road, Cambridge 38, Mass.*

Pyridines, Piperazines

Describes five pyridines and six piperazines giving physical properties, constant-boiling mixtures, solubilities, shipping data, and specification limits. Are used as intermediates for food supplements, pharmaceuticals, surfactants, dyestuffs, and resins. (20 pages). *Union Carbide Chemicals Co., 30 East 42nd St., New York N. Y.*

Ratchet Wrenches

Describes reversible ratchet wrenches including ½-in. square drive socket sets. Gives data such as nominal wrench opening figures, ordering data, specifications, etc. Catalog 62 (11 pages). *Lowell Wrench Co., Worcester, Mass.*

Machine Accessories

Lists arbors, adapters, collets and other machine shop accessories giving illustrations, materials, price, and size. Other equipment such as work driving dogs, socket wrenches, cutter arbors and draw-in bolts are also discussed. No. 37A (47 pages). *Brown & Sharpe Mfg. Co., Providence 1, R. I.*

Grinding Machines

Describes 24 internal grinding machines including multipurpose chucks, automatic chucks, roll and shoe type, and centerless grinders. Also describes 13 boremastics, tool sharpeners, wheelheads, and attachments. General Catalog 1-2 (16 pages). *Heald Machine Co., 12 New Bond St., Worcester 6, Mass.*

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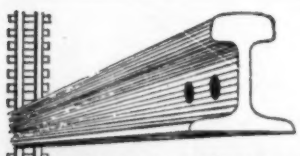
CLASSIFIED ADVERTISING
BUSINESS OPPORTUNITIES
EQUIPMENT—USED or RESALE

FOR SALE BY SEALED BID
COMPLETE SECTION OF USED BATCH HANDLING SYSTEM
INCLUDING
57 batch cans, approx 900 lineal feet of track, 3 electric mules and right and left 45 degree switches.
Bids to be opened on February 26, 1960. We reserve the right to accept or reject any or all bids.
Bid forms may be obtained by contacting
H. L. HAYS, *Plant Purchasing Agent*
OWENS CORNING FIBERGLAS Corp.
NEWARK, OHIO



RELAYING • NEW RAILS
TRACK MATERIALS
MIDWEST STEEL CORP.
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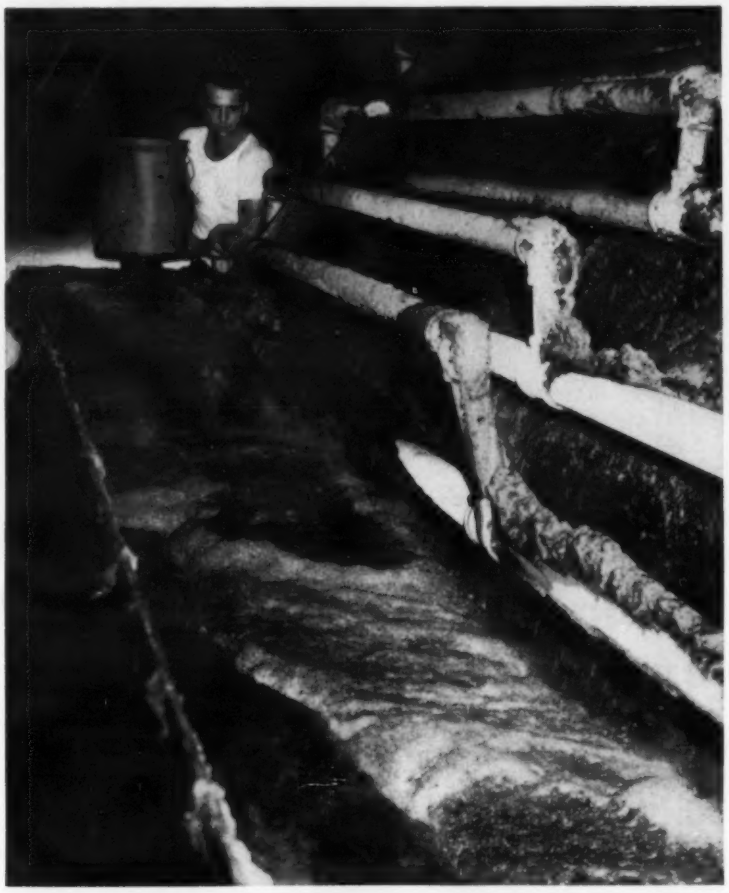
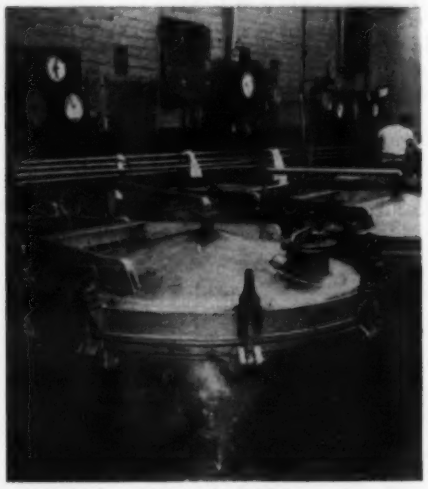
CHARLESTON 21, W. VA.

SILICONE NEWS from Dow Corning

Down Foam and Up Production





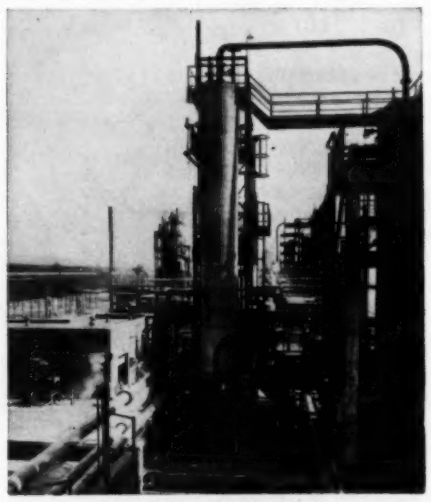
IN PACKAGE DYEING

No matter what you produce or process, you'll find Dow Corning silicone defoamers are economical; savings and production advantages are multiple. Prove this with your own tests using a generous trial sample that's yours for the asking. In writing for this free sample, please indicate your problem and mention the type of system—oil, aqueous, nonaqueous, food products, or any other. Address Dept. 3602 for a rapid reply.

Job-Proved Dow Corning Silicone Defoamers Save Time, Material, Money

Foam may be fine in a brewery. But in most processing plants, it's a sign of inefficiency. Foam reduces production capacity, slows processing, increases waste — can skyrocket your costs way out of proportion. But why accept foam as a necessary evil when Dow Corning silicone defoamers are so readily available to knock out "bubble trouble" . . . quickly, easily and economically?

Imagine . . . just a few drops of a Dow Corning silicone defoamer is all it takes to control even the most violent and persistent foamers. And these versatile silicone defoamers neither alter nor contaminate products or processes. This permits you to use a Dow Corning defoamer wherever foam is a problem — in textile dyeing, papermaking and sizing; in refining, distilling and gas "scrubbing"; in food processing and packaging; in formulating paints, adhesives, pharmaceuticals . . . you name it.



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This Week's

Purchasing Perspective

FEB. 15-21

(*Continued from page* 1)

But auto parts producers in Cleveland were sharing little of the gloom, declaring the pessimism was premature.

And a spokesman for an Akron tire company told PURCHASING WEEK he saw no breast-beating there. "We've learned to ride with demand," he said. "What we may lose in March will be replaced by the spring auto thaw."

• • •

Back in December, automakers targeted an optimistic 2,270,000 passenger cars for first quarter 1960 production. This has been shaved ever so slightly to 2,250,000. **Detroiters** facing the situation realistically **now consider a 6.5-million model year** (including imports) a little **conservative,** but the previously oft-heard **7-million estimate too optimistic.**

• • •

Basic industry suppliers contacted by PURCHASING WEEK note that even the lower figure can hardly be considered a bad year. And even among those expecting cutbacks, the order rejiggering was expected to come mostly in parts for standard-size autos in what used to be the low-priced field.

Both Ford and Chrysler admittedly underestimated the immediate market for Falcon and Valiant. And they, along with Chevrolet, stand ready to adjust production to suit consumer preference.

• • •

BUYERS NOTES—Fastener manufacturers report business continuing at high levels with the outlook for 1960 still reaching 10%-20% above 1959. Fastener makers who look to Detroit for much of their business said last week they had received neither cutbacks nor slowdowns in order rates . . . **Douglas Aircraft has made its annual inventory of capital equipment (50,000 items) a one-man job.** The "census-taker" reads equipment titles and numbers to a portable tape recorder, then turns his tape over to a key punch operator in the tabulating department.

AFL-CIO Now Dangles an Olive Sprig

(*Continued from page* 1)

ord since the merger of the two labor federations in 1955. Since then, employers have become more and more aggressive in bargaining sessions, culminating in the long steel strike of 1959-60.

And, in that five year period, the AFL-CIO has actually lost ground in its goals of enticing unorganized members into the union fold.

This setback was frankly spelled out to the council by the AFL-CIO's top organizer, Jack Livingston, in a report on the federation's organizing past and potential. Said Livingston, "The AFL-CIO has made no net gain in new members since the merger." In fact, while its membership has remained at about 13 million, the total of unorganized workers has grown two million—to 44 million altogether.

Livingston wants to initiate a brand new drive for white collar and professional workers—particularly in the chemical, oil, electrical machinery and aircraft industries. He urged the council to stir the international unions into action.

The AFL-CIO organizing director noted that conflicting claims by rival unions for the same unorganized territory had virtually killed off the AFL-CIO's effectiveness. The federation rule has been to stay out of a drive where two affiliates are fighting over the same plant or industry.

He told the council members they should ask an AFL-CIO convention for power to move into an organizing feud and take over—if that's what is necessary to get the job done.

The federation's frustrations over organizing are not much diminished when it comes to dealing with management. AFL-CIO President George Meany and other union officials are determined to find a new approach to employers to wipe out any hostility that is left over from the steel strike and from last year's reform legislation battle in Congress.

Meany said he was ready to sit down and talk as soon as the Eisenhower Administration arranged the meetings because he feels the atmosphere has changed sufficiently so that a labor-management conference might get somewhere.

ICC Gives Coal the Nod Over Oil on Barge Rates

(*Continued from page* 1)

Edison Co. for the fuel contract period from April 1, 1959, to March 31, 1969, set the pattern for the price cuts.

At the start of 1959, Consolidated Edison had to pay $10.53 a ton for coal, and could buy equivalent oil heat for $9.57. The utility put coal on notice that it stood to lose 2.5 million tons of Consolidated Edison business annually to residual oil.

Coal producers in the Appalachians cut their mine price 25¢ a ton. The railroads offered a scheme to cut freight rates for just that part of the coal market that could be ousted by oil.

For Consolidated Edison, this figured to 50¢ a ton less on everything over 3 million tons, providing the utility uses 5.5 million tons in the 12-month period. Twelve other utilities—from Salem, Mass. to Baltimore—were offered the same 50¢ cut, but with minimum requirements tailored to the amount of coal threatened by oil in each area.

Senator Warns of 'Serious Gap' in Procurement

Washington—Sen. Leverett Saltonstall says there is another "serious gap" in American military power—this one in armed forces procurement.

While Congress is embroiled in a bitter debate over whether there is a gap in American military striking power, Saltonstall feels the long lead time in military buying is equally critical to U. S. survival.

"The time lag between the conception of a workable idea to the delivery of the military product," he says, might be almost twice as great as that in the Soviet Union.

"This is a real and a serious gap," the Massachusetts senator told a Senate Armed Services Subcommittee last week. The subcommittee opened what is expected to be a year-long study of ways to overhaul Pentagon buying procedures.

Saltonstall says the subcommittee has a "solemn obligation to streamline our armed forces and their procurement services, so they can help provide maximum security for the United States and the rest of the Free World."

As the first step, he says Congress should take action to assure "lightning fast responses" in military technology that are needed for survival in the space age.

He also lists two other recommendations: **1.** tightening up Pentagon controls over subcontracting, and **2.** greater use of the weapons system concept of procurement.

Under the concept of weapon system management the Pentagon centralizes control over a development project to a far greater degree than before. The stronger central control is normally placed in the hands of a prime—or weapon system—contractor.

He has clearer authority to design specifications (for the weapon system as an entity and for major components) and to award subcontracts. He also has the responsibility to run the project from the earliest research stage right through to operational deployment.

The objective of the weapon system management concept is to speed work on what is invariably a fantastically complicated new weapon — a supersonic bomber, an ICBM, a radar system, and such. The details on how centralized control is given the prime contractor, however, varies.

Glass Container Makers Announce New Price Hikes

New York—Leading glass container makers, under pressure from rising labor and material costs, say the industry is in dire need of a price hike.

But top industry officials told PURCHASING WEEK last week that stiff competition, particularly from metal and plastic containers, may prohibit any near-term price rise.

Two Sided Pressure

The industry is under pressure from two sides:

• **Labor:** The Glass Container Manufacturers Institute has just signed a two year industry-wide contract with the Glass Bottle Blowers Union that provides a first year wage hike of 6½¢ to 13½¢ per hour and a second year increase of 7¢ to 10¢. The industry faces another wage hike when contracts of miscellaneous workers run out at the end of this month.

• **Materials:** With carton prices expected to rise, the industry faces higher packaging costs. Glass container makers buy over $7 million worth of cartons annually.

One industry executive told PURCHASING WEEK, "We haven't formulated any specific plans on the matter of prices. While we definitely need some price increases, we feel that such a move might possibly permit further inroads into our markets, particularly by plastic containers."

Private Fleet Operators Assess New Developments, Including 'Birdieback'

(*Continued from page* 1)

the basis for an expensive shake-up now taking place in their industry:

• **Dieselization.** The diesel engine, which chased steam off the railroads and gasoline out of long-haul trucking, is now expanding into short-haul transportation.

"In Europe," C. Gordon Benett, vice president of Leyland Motors (U.S.A.) Inc., pointed out, "diesel engines are used for every purpose in the transport field—even for one-ton panel trucks."

• **Birdieback.** The costs of this newest form of containerization — movement of demountable truck containers by air—will merely multiply the already mounting expense of the piggy-fishy-back trends.

• **Laws.** The Landrum-Griffin Bill was described by one industrial relations expert as an "inept statement of legislative intent," which will take 10 or 12 years of legal battles by transportation men to straighten out.

The industry, declared Charles A. Kothe, industrial relations expert for the National Association of Manufacturers, will, however, profit from the new law because of its provision for criminal penalties for the old labor practice of demanding "unloading fees."

The private fleet operators, representing the largest segment of the nation's trucking industry, also called for improved interstate reciprocity in their treatment of out-of-state vehicles.

Current differences in state laws governing maximum axle loads, taxes, and registrations are proving to be "too large a burden for the transportation industry to handle," said one executive.

An expert on the subject, E. J. Amey, director of the reciprocity program of the American Association of Motor Vehicle Administrators, pointed to the Western system of proration, under which fleet owners can meet their licensing costs on the basis of mileage operated in different states, as one solution to the problem.

Price Changes for Purchasing Agents

Item & Company	*Amount of Change*	*New Price*	*Reason*
INCREASES			
Red cadmium, lithopone colors, bbl., lb.	.04	....	cadmium boost
Tin Salts, Potassium Stannate, lb.	.004	.78	metal boost
Sodium Stannate, lb.	.005	.638	metal boost
Tin Crystals, anhydrous, lb.	.006	$1.001	metal boost
Mercury, 76-lb. flask	$1.00	$211.00	low supply
Valonia, cups, ton	$5.00	$95.00	tight supply
Bears, ton	$5.00	$120.00	tight supply
Tires, Goodyear, cars & small trucks	3%	....	incr. costs
Large trucks	5%	....	incr. costs
Carbon Black, Channel, bgs., crlts., lb.	.0075	.085	
Tin, metal, Straits, lb.	.01	$1.01	
Work clothing fabrics, yarn-dyed & piece dyed, yd.	.005-.015	....	high demand
REDUCTIONS			
Casein, Arg., carlots, lb.	.0025	.1925	low demand
Germanium tunnel diodes, GE, 2 kinds	$50 & $62.50	$10 & $12.50	market entry
Diodes, Micro-Min, Sylvania	10-30%	....	prod. econs.
Gasoline, Penn., Fair Trade, retail, gal.	.01	....	competition
Gasoline, Atlantic, East Penn., dlr. tnkwgn., gal.	.005	.236	competition
West Penn., dlr. tnkwgn., gal.	.006	.243	competition
Capacitor equipments, secondary network, GE	20%	....	prod. econs.
Glycerin, crude, East, soap dye, lb.	.005	.195	low demand
saponification, lb.	.005	.215	low demand
Fuel oil, #2, Penn., retail, gal.	.004	....	warm weather

Compact Sales Surge as Economy Wins Out Over Glamour

(*Continued from page* 1)
feel "put out" when chauffeured in them.

But despite the uncertainty over "true economy" and the "psychological" prestige barrier, compacts, in many cases, have already arrived:

- One out of every five fleet cars now being sold by Ford is a Falcon.
- Almost 73% of the state and local governmental P.A.'s surveyed are now using and intend to increase their purchases of compacts for fleet use.

(Armour & Co., large Chicago meat packer, is replacing its entire fleet of 2,900 cars with compacts—all makes.

- General Adjustment Bureau, a large New York insurance adjuster, is converting 50% of its 3,300 car fleet to Falcons.
- A large West Coast utility with a fleet of 1,800 cars plans to purchase 1,000 compacts over the next two years.

This is only a brief sampling of the rapid trend toward compacts in the fleet arena—a trend that is growing in intensity as more industrial and governmental executives forget prestige and go for cash savings.

As the fleet car executive for a large Midwest manufacturer told PURCHASING WEEK, "the main objection to compacts has been psychological on the part of our salesmen. But we do not intend to let this 'downgraded' feeling stand in the way of upgraded economies."

Here's how auto executives summarize the outlook for the five compact nameplates:

FALCON: Ford says its "Plain Jane" of the compacts is accounting for more than half of compact fleet sales. Recent sales include 850 units to General Foods, New York, and 500 to General Adjustment. One fleet sales official says Bell Telephone is buying around 200 Falcons a month.

RAMBLER: American Motors hotly denies Ford's claim to supremacy. Fleet sales of Ramblers through January of the '60 model year already total 13,000 units, up 117% from a year ago. A spokesman notes Consolidated Edison has standardized its 8,000 unit fleet on Ramblers and adds that utilities across the country are buying mostly Ramblers for their fleets.

LARK: Studebaker figures 23% of its sales volume stems from fleet buying. It points to 450 Larks owned by Dade County, Fla.

CORVAIR: Chevrolet fleet sales officials say two factors have kept fleet buyers from plunging into their compact: lack of a four-door model until recently because of the steel strike, and widespread knowledge of Corvair's fuel economy difficulties. (Corvair has been pinpointed as a disappointing gas guzzler in several national surveys.) They say these handicaps now have been eliminated and look for a big sales increase.

VALIANT: Chrysler's mighty mite, a late entry is still a scarce item on the consumer market and is only getting into fleet hands in "evaluative" numbers. But the automaker has high fleet hopes for this comparatively high-horsepower (up to 149) model.

Compacts are having rough going in one fleet area—the taxicab market. A startling example of this (in Detroit of all places) —Mayor Louis Miriana has instructed officials not to issue any more permits to operators of compact taxis. Checker Cab Co., largest operator here, is removing nine compacts from its fleet —citing " customer dissatisfaction" as the main reason for the action.

PURCHASING WEEK correspondents, interviewing fleet buyers in cities across the country, offer this blow-by-blow account of "compact" progress:

Pittsburgh: Observers say that the steel companies are reluctant to encourage the purchase of cars that use less steel per unit than standard makes. Non-steel firms here, however, are leaning more and more toward compact fleets.

St. Louis: Some company employees may not like it, but compact cars are going to be around for a long time, most larger St. Louis fleet operators agree. One supporting example — Mayor Raymond Tucker has instructed all city department heads to give first preference to compact cars when making new fleet purchases. The main reason: "tremendous economies in store."

Dallas: Only a few firms here are "testing" compacts for fleet use, most are not even doing that. The lack of enthusiasm was aptly expressed by the purchasing director for a large engineering firm, "compacts appear to me to be more of a sports car and I think the price bears this out."

Buffalo: Industries, utility firms, and service organizations in this western New York area appear ready to stampede toward the compact—that is, if initial economy trials support such a move.

Cleveland: Many fleet buyers here have increased substantially the percentage of compact cars in their fleets with the Big Three models, and expect to further increase that percentage next year. Most firms, however, said they do not intend to go completely compact.

Atlanta: The mighty mites are finding their place in fleets here, but in a "specialized" way. Most companies say they will use compacts for short hauls and stick with standard models for the longer trips.

Boston: The big beef of fleet operators against compact cars here is "lack of room." On the other hand, the majority feel that the advantages of compacts far outweigh their disadvantages. One champion of compact, the fleet buyer of a large gas company stated flatly: "We plan to go more and more into compacts as quickly as possible."

Cincinnati: The use of compacts by this city's big industrial fleet buyers is still pretty much in the embryonic stage. Most feel it's too early to be definite on results.

Here are some of the advantages and disadvantages of compact cars in fleet use culled from industrial and governmental fleet car buyers:

ADVANTAGES

Lower initial purchase costs, easier parking, greater gas mileage, less maintenance costs, excel on short trips, lower cost of replacement parts, greater tire mileage, less storage and parking room required, and lower insurance rates

DISADVANTAGES

Lower resale value, lack of space, uncomfortable for long trips, lack of power on hills and for passing, limits size of driver behind wheel, and psychological—hurts salesmen's pride

What They Say About Compacts

"A salesman's car is his palace. He uses it to take customers to and from the country club and out 'on the town.' He wants his car to reflect credit on himself and his company. That's why he doesn't like compacts."—Pittsburgh.

●

"Tall employees have to fold up like accordions to drive small cars. Starting the day with the prospect of spending seven hours in such a position, he takes it out on the car."—Boston.

●

"We've received many letters of apology from our men who at first protested against driving small cars. They now write to say how satisfied they are."—New York.

●

"Everyone who has driven compacts so far has given us favorable reports, including one department head who is entitled to a plushier car but prefers the compact model."—St. Louis.

●

"We expect our total fleet of about 2,900 cars to be 60-70% compact in three years. We don't expect complaints from our salesmen. They are hired to sell not to squawk about driving."—Chicago.

"I don't believe compact cars belong in industrial fleets. They belong on sports car tracks."—Dallas.

●

"When fleet car operators are convinced they want economy, you'll see a tremendous increase in the use of compact cars."—Cincinnati.

●

"The way to eliminate snob appeal for a big car is to get behind the wheel of a compact."—Sacramento.

●

"This city has established a policy to buy nothing but compact cars in the future except in police service. We have found tremendous economies in the small car."—Fort Lauderdale, Florida.

●

"Because of customer dissatisfaction, we are discontinuing use of compact cars as cabs. The biggest complaint has been the difficulty in bending over to enter the rear seat from the curb."—Detroit.

●

"We experimented with Ramblers and Larks for fleet use but didn't get anywhere near the mileage we were promised and really took a beating on their resale."—Cleveland.

Late News in Brief

Goodyear Hikes Prices

Akron—Goodyear Tire & Rubber Co. raised replacement tire prices last week by 3% on nearly all passenger tire lines and from 3% to 5% on most truck tires. The move, attributed to higher material and labor costs, is expected to be followed shortly by other tire makers.

At the same time, Goodyear announced it was raising prices 3% on farm implement tires and industrial pneumatic tires and tubes, and 5% on large size truck tubes.

Anaconda Strike Settled

Butte, Mont.—Complete copper peace was restored late last week when Anaconda Co. reached a three-year agreement with the Mine-Mill workers at its mining facilities here.

The Anaconda settlement, last in an industry-wide strike which began some six months ago, came through the efforts of federal mediators. Phelps Dodge also settled its strike at El Paso last week.

Food Buyers Want Guarantees

(*Continued from page* 1)
assurance that the material they are using will fit in under the new regulations."

Under the new FDA "Food Additives Amendment," which takes effect March 6, paper, tin can, and plastics packaging manufacturers will be required to submit proof that their materials do not contain toxic chemicals that "migrate" into the enclosed food, or that such chemicals appear in the food in non-toxic quantities.

See No Immediate Ban

FDA officials in Washington, however, working closely with industry representatives, indicated they know "of no packaging material that will have to go off the market March 6." In addition, the officials stated, they expect to "grant a great many extensions of time" to the packaging industry, which got a late start in preparing to meet the deadline.

Polyethylene producers, especially, are working hard to get FDA "GRAS" (generally regarded as safe) approval for film. Many manufacturers in this industry report they are now sending customers form letters that have the "unofficial O.K. of the FDA."

Hoping for FDA

The letter, according to a U.S. Industrial Chemicals Co. spokesman, tells buyers not to worry about their plastics purchases because "the industry has submitted the technical data required by the FDA," which now is evaluating the information. "The industry trusts that polyethylene will soon receive the recognition of the FDA," the letter adds.

While Monsanto Chemical and American Can Co. have not used the letter as a sales "come-on," Monsanto, at least, is telling its best customers that the Society of Plastics Industry is optimistic about getting polyethylene on the approved list, or at least of obtaining an extension beyond the March 6 date.

Because the new law makes the packager responisble for the chemical content of the food, "the purchasing man is fully justified in demanding a guarantee from his supplier," said William J. Sauber, Dow Chemical liaison with the FDA. "After all," he told PURCHASING WEEK, "the packager is at the end of the line. When there's an investigation, he's the one who will get his name in the paper."

Steel Buyers Say the Heat Is Off Now on Inventories

(*Continued from page* 1)
we want and our inventories are in about as good shape as ever." American Can Co. officials in New York say they expect to have "a satisfactory tinplate stock sometime in the second quarter."

Steel prices, too, reflected a lessening demand in these sensitive areas:

- **Warehouses.** Price cuts of $1/ton on hot rolled steel products, which hit the St. Louis, Pittsburgh, Cleveland, and Buffalo areas recently, spread to St. Paul and Dallas last week. The Dallas price slash averaged $5/ton. Warehousers now fear they won't hit predicted 1960 sales goals of 10% above 1959.
- **Pittsburgh scrap.** Many mills here reported they are now able to get No. 1 heavy melting scrap —the key grade melted in open hearth furnaces—at $2 and $3 off the $43/ton list. No. 2 bundles also sagged a dollar or two from previous $31/ton levels.

Mill production, which was rolling along at over 95% of capacity two weeks ago, eased off a fraction of a percent last week.

Adolph Ruediger, director of purchases at Carrier Corp. and chairman of the NAPA Steel Committee, predicts output "may drop still further to 90% in March or April, and as low as 80% during the last six months of the year."

Ruediger told PURCHASING WEEK that inventory problems had now boiled down to "specific items in specific sections of the country, depending on the industry in that area."

"Zinc coated and white flange beams," he said, "seem to be tight all over. In Cleveland, the machine-tool industry is hurting for hot rolled plates. With the auto industry going full speed ahead in Detroit, cold rolled products are in greatest demand."

Homer J. Merchant, Vice President-Sales Manager, United Air Lines

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